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19 JUN 1967

From: Commanding Officer, U. S. Naval Ammunition Depot, Crane, Indiana
To: National Aeronautics and Space Administration, Goddard Space Flight Center, Electrochemical Power Sources Section (716.2), Space Power Technology Branch, Greenbelt, Maryland 20771

Subj: Monthly Progress Report on National Aeronautics and Space ~~Administration~~ Space Cell Test Program, submission of (3 copies)

Encl: (1) Monthly Progress Report ~~of~~ 28 February 1967

1. The progress report for National Aeronautics and Space Administration purchase order W11,252B on the space cell test program is submitted as enclosure (1).

C. G. LYNCH
By direction

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MONTHLY PROGRESS REPORT THROUGH 28 FEBRUARY 1967

LIFE CYCLE TESTS

TOTAL NUMBER OF PACKS IN PROGRAM: 209

SECTION I

1. Status of original Cycling Program: The cycling program has included cells from the following manufacturers; General Electric Company (G.E.), Gould-National Batteries, Inc. (Gould), Sonotone Corporation (Sonotone), and Gulton Industries, Inc. (Gulton).

TOTAL NUMBER OF PACKS IN ORIGINAL PROGRAM: 84

	Total Number of Packs Cycled To Date	Cycling	Failed	Cells Failed* Since Last Report	Total To Date
NICKEL-CADMIUM (10-cell packs)					
G.E. 3.0 a.h.	12	5	7	0	47
Gould 3.5 a.h.	12	3	9	0	64
Sonotone 5.0 a.h.	12	5	7	0	48
Gulton 6.0 a.h.	12	2	10	0	69
TOTAL	48	15	33	0	226
NICKEL-CADMIUM (5-cell packs)					
G.E. 12 a.h.	12	6	6	0	18
Gulton 20 a.h.	12	2	10	1	36
Gould 20 a.h.	12	3	9	1	28
TOTAL	36	11	25	2	84

*All failure analysis results are cumulative. Total pack failures are shown on pages 15 through 42; partial pack failures on pages 43 through 51.

Enclosure (1)

2. Test Parameters:

a. General Cycling Program:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge:

(a) 1.55 ± 0.03 volts per cell at 0° C.

(b) 1.49 ± 0.03 volts per cell at 25° C.

(c) 1.45 ± 0.03 volts per cell at 40° C.

(3) Depth of Discharge:

(a) 90-minute and 3-hour orbits:

1. 15 percent and 25 percent at 0° C.

2. 25 percent and 40 percent at 25° C.

3. 15 percent and 25 percent at 40° C.

(4) Orbit Time:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 3 hours--30-minute discharge and 150-minute charge.

3. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 69 through 74.

4. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs.

b. The attached data sheets give end of discharge and end of charge voltage readings for each cell on each cycle recorded.

SECTION II

1. Status of additions to Cycling Program: The cycling program has included cells from the following manufacturers; General Electric Company (G.E.), Sonotone Corporation (Sonotone), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton), Delco-Remy (Delco) and The Electric Storage Battery Company (E.S.B.).

TOTAL NUMBER OF PACKS ADDED TO THE PROGRAM: 125

	Total Number of Packs			Cells Failed*	
	Cycled To Date	Cycling	Failed	Since Last Report	Total To Date
NICKEL-CADMIUM (10-cell packs)					
Gulton 3.6 a.h. SHERFEY	1	0	1	0	8
Gulton 3.6 a.h. COULOMETER	1	0	1	0	4
TOTAL	2	0	2	0	12
NICKEL-CADMIUM (5-cell packs)					
G.E. 5.0 a.h. NIMBUS	6	4	2	0	9
G.E. 12 a.h.	1	0	1	0	5
G.E. 12 a.h. 3rd Electrode	10	0	10	5	7
G.E. & Gulton 6.0 a.h. COUL	1	0	1	0	8
Sonotone 3.0 a.h.	6	3	3	0	10
Sonotone 5.0 a.h. COULOMETER	1	1	0	0	0
Sonotone 5.0 a.h. STABISTOR	8	1	7	0	25
Gulton 1.25 a.h.	4	4	0	1	3
Gulton 3.5 a.h. PLITT SEAL	7	7	0	0	0
Gulton 4.0 a.h. COMMERCIAL	6	4	2	0	7
Gulton 4.0 a.h. COULOMETER	2	2	0	0	0
Gulton 5.0 a.h. NIMBUS	6	5	1	0	6
Gulton 5.6 a.h. FOLDED SEAL	4	3	1	1	5
Gulton 5.6 a.h. NONFOLDED SEAL	4	3	1	0	5
Gulton 6.0 a.h.	1	0	1	0	3
Gulton 6.0 a.h. HSI	3	1	2	0	6
Gulton 6.0 a.h. 3rd Electrode	7	4	3	1	12
Gulton 6.0 a.h. COULOMETER	4	4	0	0	0
Gulton 12 a.h.	6	3	3	0	11
Gulton 12 a.h. 3rd Electrode	2	2	0	0	0
Gulton 50 a.h.	2	0	2	0	6
TOTAL	91	51	40	8	128

*All failure analysis results are cumulative. Pack failures are shown on pages 52 through 68.

	Total Number of Packs Cycled To Date	Cycling	Failed	Cells Failed* Since Last Report	Total To Date
SILVER-CADMIUM (10-cell packs)					
Yardney 12 a.h.	2	0	2	1	17
Yardney 3.0 a.h.	1	1	0	0	0
Yardney 11 a.h.	2	2	0	0	0
TOTAL	5	3	2	1	17
SILVER-CADMIUM (5-cell packs)					
Yardney 5.0 a.h.	12	8	4	0	12
ESB 8.0 a.h.	1	1	0	0	0
Yardney 12 a.h.	3	2	1	0	2
TOTAL	16	11	5	0	14
SILVER-ZINC (10-cell packs)					
Yardney 12 a.h.	1	0	1	0	6
Yardney 16 a.h.	1	1	0	0	0
Delco 25 a.h.	2	1	1	0	5
TOTAL	4	2	2	0	11
SILVER-ZINC (5-cell packs)					
Delco 25 a.h.	4	0	4	3	14
Delco 40 a.h.	1	0	1	0	2
TOTAL	5	0	5	3	16

*All failure analysis results are cumulative. Pack failures are shown on pages 52 through 68.

2. Test Parameters:

a. General Nickel-Cadmium Cycling Program:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge:

(a) 1.55 ± 0.03 volts per cell at 0° C.

(b) 1.49 ± 0.03 volts per cell at 25° C.

(c) 1.45 ± 0.03 volts per cell at 40° C.

(3) Depth of Discharge:

(a) 90-minute and 3-hour orbits:

1. 15 percent and 25 percent at 0° C.

2. 25 percent and 40 percent at 25° C.

3. 15 percent and 25 percent at 40° C.

(b) 24-hour orbits:

1. 50 percent at 25° C and 40° C.

(4) Orbit Times:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 3 hours--30-minute discharge and 150-minute charge.

(c) 24 hours--1-hour discharge and 23-hour charge.

b. Nimbus Packs:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge: 1.49 ± 0.03 volts per cell at each temperature.

(3) Depth of Discharge:

(a) 15 percent and 25 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90-minutes--30-minute discharge and 60-minute charge.

c. Third Electrode Packs (Gulton):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge: None. Limit is controlled by the third electrode voltage.

(a) 150 millivolts at 0° C.

(b) 300 millivolts at 25° C.

(c) 300 millivolts at 40° C.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

d. Third Electrode Packs (General Electric):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge: None. Limit is controlled by the third electrode voltage; 400 millivolts at all temperatures.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

e. Stabistor Packs:

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

(2) Voltage limits per pack on charge: None. Stabistor controls cell voltage.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at -20° C.

(b) 25 percent and 40 percent at 0° C.

(c) 25 percent and 40 percent at 25° C.

(d) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

f. Coulometer Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Coulometer controls cell voltage.

(3) Depth of Discharge:

(a) 30 percent for 5 cells (Sonotone 5 a.h.)--Coulometer built by Goddard Space Flight Center.

(b) 40 percent--coulometer built by G.E. (Replaced by Gulton coulometer.)

1. 10 cells (Gulton 3.6 a.h.)

2. 11 cells (6 Gulton 6.0 a.h. and 5 G.E. 6.0 a.h.)

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

g. Sherfey Cycling Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Pack cycled in the partially discharged state.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

(5) Cell Type: Gulton 3.6 a.h.

(6) This type of cycling starts with the cells in a completely discharge condition. Each cycle consists of a charge of 60 percent of the cell's rated capacity followed by a discharge of 40 percent of the cell's rated capacity. Upon completion of each fifth cycle, the cells are discharged through a resistor for 90 minutes to return the cells to the completely discharged condition for the start of the next sequence of five cycles. In this manner, the cells operate below the 100 percent charged state much of the time thereby preventing overcharging and buildup of excessive gas pressure.

h. Neoprene-Seal Packs: (Folded and Nonfolded)

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

(2) Voltage limits per pack on charge:

(a) 1.55 ± 0.03 volts per cell at -20° C.

(b) 1.55 ± 0.03 volts per cell at 0° C.

(c) 1.49 ± 0.03 volts per cell at 25° C.

(d) 1.45 ± 0.03 volts per cell at 40° C.

(3) Depth of Discharge: 25 percent at all temperatures.

(4) Orbit Times: 90 minutes--30-minute discharge and 60-minute charge.

i. Silver-Cadmium Packs:

(1) Ambient Temperatures:

(a) 90-minute orbit:

1. -20° C.

2. 0° C.

3. 25° C.

(b) 24-hour orbit:

1. 0° C.

2. 25° C.

3. 40° C.

(2) Voltage limits per pack on charge:

(a) 90-minute orbit:

1. 1.60 ± 0.03 volts per cell at -20° C.

2. 1.58 ± 0.03 volts per cell at 0° C.

3. 1.55 ± 0.03 volts per cell at 25° C.

(b) 24-hour orbits: 1.50 ± 0.03 volts per cell at 0° C, 25° C and 40° C.

(3) Depth of Discharge:

(a) 90-minute orbit: 25 percent at all temperatures.

(b) 24-hour orbit:

1. 20 percent and 50 percent at 0° C.

2. 20 percent at 25° C.

3. 20 percent and 50 percent at 40° C.

(4) Orbit Time:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 24 hours--1-hour discharge and 23-hour charge.

j. Silver-Zinc Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: 1.97 ± 0.03 volts per cell at 25° C.

(3) Depth of Discharge:

(a) 3-hour orbit: 40 percent at 25° C.

(b) 24-hour orbit: 25 percent and 40 percent at 25° C.

(4) Orbit Times:

(a) 3 hours--30-minute discharge and 150-minute charge.

(b) 24 hours--1-hour discharge and 23-hour charge.

k. Two Step Charge Regulator:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge:

(a) Upper Voltage Limit: 1.97 ± 0.03 volts per cell.

(b) Low Current Limit: 0.35 amps.

(c) Overcharge Voltage Limit: 1.87 ± 0.03 volts per cell.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 24 hours--1-hour discharge and 23-hour charge.

(5) Cell Type: Delco-Remy 25 a.h.

(6) When silver-cadmium and silver-zinc cells are put on a long charge period with only a voltage limit, the cells begin to unbalance when the pack goes into overcharge. A new method of charging cells of these types was developed at Goddard Space Flight Center. The cell pack is charged until it reaches the pack upper voltage limit. At this time, the charge current is reduced to maintain this voltage limit. When the charge current decreases to 350 milliamperes, the on-charge voltage limit is then reduced to the lower pack voltage limit which is equal to the open circuit voltage of the cell pack. In this method, the pack receives no more charge until

there is a sufficient drop in the pack voltage to reset the pack voltage limit to the upper value. This method prevents the cells from becoming unbalanced during long charge periods.

1. Silver-Cadmium Packs (Third Electrode):

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: 1.51 ± 0.03 volts per cell.

(3) Depth of Discharge: 16.7%.

(4) Orbit Time: 8 hours--1-hour discharge and 7-hour charge.

3. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 74 through 80.

4. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs. On the 24-hour packs, complete data is taken every eight cycles. Complete data is taken every 24 cycles on the 8-hour packs.

5. Revised Pack Numbering System:

a. The pack numbering system has been revised. The revised numbers, the largest of which is 128, all end in a letter. The revised numbers are listed to the right of the original numbers on the following table.

PACK NUMBER REVISION TABLE

ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER
1	1A	27	27A	53	53A	80	80A
2	2A	28	28A	54	54A	82	82A
3	3A	29	29A	55	55A	83	83A
4	4A	30	30A	56	56A	84	84A
5	5A	31	31A	57	57A	85	85A
6	6A	32	32A	59	59A	86	86A
7	7A	33	33A	60	60A	87	87A
8	8A	35	35A	61	61A	88	88A
9	9A	36	36A	62	62A	89	89A
11	11A	37	37A	63	63A	90	90A
12	12A	38	38A	64	64A	91	91A
13	13A	39	39A	65	65A	92	92A
14	14A	40	40A	66	66A	93	93A
15	15A	41	41A	67	67A	94	94A
16	16A	42	42A	68	68A	95	95A
17	17A	43	43A	69	69A	96	96A
18	18A	44	44A	71	71A	97	97A
19	19A	45	45A	73	73A	98	98A
20	20A	47	47A	74	74A	99	99A
21	21A	48	48A	75	75A	100	100A
23	23A	49	49A	76	76A	101	101A
24	24A	50	50A	77	77A	102	102A
25	25A	51	51A	78	78A	103	103A
26	26A	52	52A	79	79A	104	104A

PACK NUMBER REVISION TABLE (Contd)

ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER	ORIGINAL NUMBER	REVISED NUMBER
105	105A	175	75C	233	33B	318	118B
106	106A	182	82B	237	37B	322	122B
107	107A	185	85B	238	38B	326	126B
108	108A	188	88C	239	39B	338	38C
110	110A	197	97B	240	40B	388	88D
111	111A	198	98B	242	42B	390	90C
112	112A	200	100B	243	43B	396	96C
113	113A	201	1B	244	44B	402	2C
114	114A	202	2B	245	45B	409	9C
115	115A	203	3B	257	57B	609	9D
116	116A	204	4B	273	73B		
117	117A	209	9B	275	75B		
118	118A	213	13B	276	76B		
119	119A	214	14B	287	87B		
120	120A	216	16B	288	88B		
121	121A	218	18B	289	89B		
122	122A	219	19B	290	90B		
123	123A	221	21B	296	96B		
124	124A	226	26B	299	99B		
125	125A	227	27B	301	101B		
126	126A	228	28B	304	104B		
127	127A	230	30B	308	108B		
128	128A	231	31B	312	112B		
174	74B	232	32B	315	115B		

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
15	25%	1.5	25°	432	7	8065	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	414	8	8254	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	479	5	8714	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Migration of Active Material, Blistering on Edge of Pos Plate, Separator Deteriorated.
			25°	267	10	10123	Low Volt Disch, Normal Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	485	4	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	447	9	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
16	40%	1.5	25°	427	7	3985	Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			25°	58	6	4473	Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.
			25°	361	1	4741	Low Volt Disch, Normal Volt Chg, Shorted, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	522	5	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
16	40%	1.5	25°	456	10	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			25°	719	4	5013	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator.
39	15%	1.5	50°	541	2	779	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	540	6	2083	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	549	7	2523	Low Volt Disch, High Volt Chg, Pos Tab Burned.
			40°	527	1	7213	Low Volt Disch, Normal Volt Chg, Deposit Around Pos Terminal, Pos Tab Burned, Migration of Neg Plate Material, Separator Deteriorated.
			40°	534	5	8109	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.5 gm, Pos Tab Burned, Migration of Active Material, Separator Deteriorated.
			40°	550	8	8109	Low Volt Disch, Normal Volt Chg, Pinpoint Penetration, Separator Deteriorated.
40	25%	1.5	40°	464	3	2073	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	3131	8	2182	Low Volt Disch, Normal Volt Chg, Leaked, Loose Plate Material on Separator.
			40°	47	7	2182	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
40	25%	1.5	40°	49	5	2446	Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.
			40°	45	10	2461	Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.
			40°	466	2	2509	Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.
			40°	441	6	2509	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
43	15%	3.0	40°	416	4	1182	Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	499	3	1515	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
			40°	412	6	1911	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			40°	426	9	2298	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Top of Separator Burned, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			40°	436	7	2515	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Poor Roll, Uneven Wind at End of Roll, Shorts at Top of Roll, Separator Deteriorated.
			40°	435	10	2656	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
44	25%	3.0	40°	222	6	1672	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.
			40°	366	8	3848	Low Volt Disch, High Volt Chg, Pinpoint Penetration, Separator Deteriorated, Blistering on Bottom Edge of Pos Plate.
			40°	459	1	3854	Shorted on Cycling, Deposit on Pos Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	77	3	3854	Low Volt Disch, Normal Volt Chg, Migration of Active Material, Separator Deteriorated.
			40°	3120	2	4487	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.
			40°	296	10	4487	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deterioration.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
3	25%	1.5	25°	73	5	2785	Low Volt Disch, High Volt Chg, Short Near Center of Core, Piece of Pos Plate Material Between Plates Causing Short Through Separator.
			25°	54	2	3090	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.7 gm, Weak Weld on Neg Tab to Plate.
			25°	165	9	4081	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.7 gm, Deposit on Glass Seal, Short Through Separator, Short at Pos Tab Near Center of Core, Neg Tab Weld to Plate Weak.
			25°	93	6	4289	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.6 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	97	7	4401	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.5 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	77	4	4751	Low Volt Disch, Normal Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates.
			25°	188	10	4751	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.1 gm, Neg Plate Material on Separator.
4	40%	1.5	25°	81	7	1609	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, High Pres Bulge Top.
			25°	90	8	1827	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.7 gm, High Pres Bulge Top.
			25°	2	1	2110	Low Volt Disch, Low Volt Chg, Separator Deteriorated at Center of Core, Under Pressure When Opened.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
4	40%	1.5	25°	43	6	2954	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.
			25°	27	3	3029	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.
			25°	198	10	3164	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.6 gm, Separator Deteriorated, Pos Plate Material Between Plates.
7	25%	3.0	25°	49	2	3007	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.7 gm, Neg Plate Material Migrated Through Separator, Separator Deteriorated, One Weak Weld Pos Tab to Plate.
			25°	37	1	3130	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.1 gm, Glass Seal Broken, Separator Very Dry, Neg Plate Material Migration, Pinpoint Penetration, Loose Neg Plate Material on Separator, Separator Deteriorated, All Tab Welds to Plate Weak.
			25°	109	6	3483	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.0 gm, Deposit on Glass Seal, Separator Deteriorated, Pinpoint Penetration, Neg Plate Material on Separator, Weak Weld on One Tab to Pos Plate Weld.
			25°	104	5	3736	Shorted on Cycling, Deposit on Glass Seal, Leaked, Lost 1.1 gm, Weak Weld Pos Tab to Plate, Neg Plate Material on Separator, Pinpoint Penetration, Separator Deteriorated.
			25°	131	7	3884	Low Volt Disch, Normal Volt Chg, Deposit Around Glass Seal, Leaked, Lost 1.7 gm, Neg Plate Material Loose, Pinpoint Penetration, Separator Deteriorated.
			25°	62	3	4173	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.4 gm, One Weak Weld on Pos Tab to Plate, Pinpoint Penetration, Separator Deteriorated.

CELL TYPE: Gould 3.5 Ampere-Hour

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS (Nickel-Cadmium)
8	40%	3.0	25°	68	6	1346	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.
			25°	112	8	1704	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, Pos Tab Weld to Bottom of Can Weak, Pos Tab Weld to Plate Weak.
			25°	39	1	1985	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.
			25°	170	10	1985	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Pos and Neg Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.
			25°	78	7	2138	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Pos Tab Weld to Case Weak, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	41	2	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.7 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, One Bad Weld Neg Tab to Plate.
			25°	130	9	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Separator Deteriorated, Pos and Neg Plate Material Impregnated Separator.
27	15%	1.5	40°	13	3	2901	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.
			40°	195	8	2901	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos Plate Material on Separator.
			40°	103	7	2998	Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
27	15%	1.5	40°	200	10	3270	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos Tab Weld to Case Weak.
			40°	197	9	4102	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			40°	11	2	4485	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
28	25%	1.5	50°	122	2	408	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
			40°	157	7	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.
			40°	158	8	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.
			40°	141	5	860	Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.
			40°	168	10	1293	Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.
			40°	121	1	1811	Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.
			40°	133	3	1811	Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.
			40°	140	4	1811	Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
28	25%	1.5	40°	155	6	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.
			40°	163	9	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.
31	15%	3.0	40°	R166	9	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.1 gm, Separator Deteriorated.
			40°	R179	10	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Short Through Separator, Separator Deteriorated, One Weak Tab.
			40°	R92	2	1696	Low Volt Disch, High Volt Chg, Pieces of Plate Material Shorted Through Separator, Separator Deteriorated.
			40°	126	3	2411	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Short Through Separator by Piece of Pos Plate Material Between Plates, Separator Deteriorated, Neg Plate Material Impregnated Separator, Tab to Plate Weld Poor.
			40°	R162	8	2477	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 2.4 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, Pinpoint Penetration, Poor Weld Pos Tab to Case.
			40°	72	1	2517	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.8 gm, Short Between Plates, Extra Piece of Pos Plate Between Plates, Separator Deteriorated, Pos Tabs to Plate Weld Both Weak.
			40°	143	6	2517	Low Volt Disch, Low Volt Chg, Short Through Separator at Start of Core, Extra Piece of Pos Plate Material, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Neg Tab Weld to Pigtail Weak, One Tab to Pos Plate Weld Weak, Still Under Pressure When Opened.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
32	25%	3.0	40°	125	6	138	Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg Lead.
			40°	65	3	495	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg Terminal.
			40°	1	1	800	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts Near Center of Core.
			40°	67	4	875	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos Tab Weld Weak to Case.
			40°	132	7	875	Failed During Shut Down to Move to Another Chamber, Leaked, Lost 4.4 gm, High Pres. Neg Tabs Pushed Out of Cell, Short at Center and Outside Edge of Core.
			40°	149	9	974	Low Volt Disch, High Volt Chg, Leaked, Lost 1.1 gm, Piece of Pos Plate Material Shorted Through Separator, Weak Welds to Case and Plates.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
2	40%	1.5	25°	811	10	3155	Shorted on Cycling, Leaked Around Seal, High Pressure Bulge on Bottom, Insulators Brittle, Exposed Grid Wires at Center of Core Penetrated Separator Causing Large Burned Area at Short, Pos and Neg Tab Weld Poor.
			25°	3628	5	3992	Low Volt Disch, Normal Volt Chg, Leaked Around Seal, High Pres Bulge on Bottom, Hole in Separator Exposing Pos and Neg Plates, Neg Plate Material Penetrated Separator.
			25°	3613	2	4411	Low Volt Disch, Low Volt Chg, Two Pieces of Neg Plate Material Wore Hole in Separator at Scoring Mark, Burned Through Plates, Neg Tab Welds Poor, Separator Beginning to Deteriorate.
			25°	3630	6	5262	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Pos and Neg Plate Material on Separator, Separator Deteriorated, Neg Tab to Plate Welds Weak, Burn Marks on Separator at Tabs, High Pressure Bulge.
			25°	3631	7	5262	Low Volt Disch, Low Volt Chg, Uncoined Plate Edges Pierced Separator Causing Partial Shorts, Burn Marks Around Tab Areas, Weak Weld on All Tab to Plate Welds, Deep Pressure Points Caused by Scoring, Separator Torn at Start of Core Exposing Pos and Neg Plate, Separator Deteriorated, Neg Plate Material on Separator.
			25°	3611	1	6671	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
25	15%	1.5	40°	4852	5	6348	Low Volt Disch, High Volt Chg, Separator Deteriorated, Large Burned Area at Center of Core, Pinpoint Penetration, Deep Scoring Caused Hole in Separator, Partial Shorts Around Edge of Plates, Deep Pressure Points Caused by Scoring.
			40°	4364	4	7052	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4317	1	7758	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4350	3	9070	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Corner of Outside Neg Plates, Grid Wire Penetrated Separator and Shorted to Pos Plate, Separator Completely Deteriorated.
			40°	6850	6	9220	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole Through Separator Near Edge of Plate Causing Short, Small Piece of Neg Plate Material Between Plates and Separator.
			40°	4347	2	9328	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Neg Plate Material Migrated Through Separator, Separator Deteriorated, Weak Weld Tab to Neg Plate.
26	25%	1.5	40°	4323	1	2487	Grid Wire Penetrated Separator at Tabs.
			40°	6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
26	25%	1.5	40°	7224	6	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.
			40°	7232	7	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Pos Tab Weld Weak, Plate Broken at Pos Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated.
			40°	4881	3	3344	Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
			40°	4240	4	3625	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.
30	25%	3.0	40°	3657	7	855	Hole in Separator Allowing Pos Plate to Hit Case, Separator Damaged at Center of Cell Allowing Pos and Neg Plate to Short Together.
			40°	3643	4	3068	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Neg Tab to Plate Welds Weak, Burn Spots Around Tabs, Deep Scoring Caused Burn Spots on Separator.
			40°	809	9	3068	Low Volt Disch, Low Volt Chg, Deposit Around Glass Seal, Burn Spots Around Edge of Separator Caused By Uncoined Edge of Plates, Deep Scoring Caused Burn Spots on Separator, Burn Spots Around Tab Areas, Separator Deteriorated.
			40°	3658	8	3684	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.3 gm, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	3617	1	4141	Shorted During Cycling, Deposit on Glass Seal, Hole in Separator at Tab Weld Area Caused Short, Separator Completely Deteriorated.
			40°	7230	10	4141	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Migration of Neg Plate Material, Separator Completely Deteriorated.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
13	25%	1.5	25°	2305	1	308	Low Volt Disch, High Volt Chg, Lost 12 gm, CO_3 Top Ceramic, High Pres Bulge.
			25°	2355	10	502	Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.
			25°	3134	5	2969	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	3211	7	3084	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	2613	4	3598	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.
			25°	2324	2	4021	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
14	40%	1.5	25°	1623	4	262	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.
			25°	1635	5	262	Voltage Fell Off During Charge, Went Flat in 3 Min. on Disch, Lost 6 gm, Concave Wall, High Pres Bulge, Ceramic Broken Inside Case, CO_3 on Outside of Ceramic, Pos Terminal Loose.
			25°	2356	1	450	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.
			25°	2387	2	1113	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	2391	3	1618	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	3208	7	2086	Low Volt Disch, Normal Volt Chg, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
17	25%	3.0	25°	1862	5	721	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1823	3	721	Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spot on Neg Plate Near Bottom Second From End, Ceramic Short.
			25°	2348	10	1688	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	1757	1	2375	Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.
			25°	1598	2	2449	Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.
			25°	2347	9	2885	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened.
18	40%	3.0	25°	1826	6	365	Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.
			25°	1615	3	608	Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.
			25°	1827	7	643	Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.
			25°	2228	9	643	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1562	5	1145	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	1233	1	1550	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
37	15%	1.5	50°	1764	3	238	Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V) Lost 4 gm, Ceramic Short.
			40°	1784	8	1566	Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.
			40°	1802	4	2819	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate.
			40°	2333	10	2981	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	1769	7	4897	Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost 1 gm, Blistering on Pos Plate, Separator Deteriorated.
			40°	1814	6	6064	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Separator Deteriorated, Neg Plate Material on Separator, Blistering on Pos Plates, Ceramic Short.
38	25%	1.5	50°	1454	8	37	No Volt on Chg or Disch, Ceramic Short.
			50°	1815	6	114	Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm, Ceramic Short.
			40°	1853	9	187	Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos Terminal (Outside), Ceramic Short.
			40°	1627	3	225	Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost 3.5 gm.
			40°	2405	5	1333	Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.
			40°	1626	2	1377	Low Volt Disch, Low Volt Chg, High Pres Bulge, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
41	15%	3.0	40°	1771	9	649	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	1801	6	1062	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	3135	2	1132	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1852	7	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	2221	8	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1632	3	1689	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
42	25%	3.0	50°	2309	8	96	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	2346	7	382	Low Volt Disch, Low Volt Chg, CO_3 on Bottom of Case, Ceramic Short.
			40°	2306	9	416	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	918	1	484	Low Volt Disch, Low Volt Chg, High Pres Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.
			40°	2340	6	3619	Low Volt Disch, Normal Volt Chg, Deposit Around Ceramic Seal and Bottom Seam of Can, Leaked, Lost 8.2 gm, Pinpoint Penetration, Separator Deteriorated.
			40°	2334	4	4133	Low Volt Disch, Low Volt Chg, Deposit Around Cracked Pos Terminal, Leaked, Lost 8.8 gm, Migration of Neg Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
61	15%	1.5	0°	1622	2	1	Volt Between 0.25 and 0.3 V Throughout Cycle, Side Concave, Burnt Case, End Neg Pushed Into Pos Tab. Cell Replaced in Pack Due to Early Failure.
			0°	1845	8	6	Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.
			0°	2397	5	2762	Low Volt Disch, Low Volt Chg, Ceramic Short.
			0°	1825	4	4094	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2311	10	4285	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2400	6	4413	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	1636	3	9760	Low Volt Disch, Low Volt Chg, High Pres Bulge, Concave Sides, Leaked, Lost 2.7 gm, Rough Place on Pos Plate Shorted Through Separator, Migration of Neg Plate Material Through Separator, Blistering on Pos Plates, Separator Deteriorated, Ceramic Short.
			0°	1616	1	10146	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Concave Sides Causing Bus to Short Against Case, Pos Tab Burned, Migration of Neg Plate Material Through Separator, Separator Very Slightly Deteriorated, Leaked, Lost 6.0 gm.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
66	25%	3.0	0°	1794	6	1045	Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side, Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.
			0°	1843	8	1173	Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.
			0°	1781	5	1237	Low Volt Disch, High Volt Chg, High Pres Bulge, Deposit Around Pos Terminal, Ceramic Broken on Pos Terminal, Blisters on Pos Plate, Burnt Spot on Separator at Blisters, Lost 1.3 gm.
			0°	1634	3	1417	Low Volt Disch, Normal Volt Chg, Ceramic Short, High Pres Bulge, One Side Concave Other Convex, Pos Plates Blistered, Lost 2.3 gm.
			0°	1823	7	2122	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.8 gm, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge, One Side Concave.
				1591	4	4414	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, High Pressure Bulge, Concave Sides Shorting Against Pos Bus, Ceramic Short, Migration of Neg Plate Material, Pinpoint Penetration of Separator.
79	50%	24.0	25°	2982	1	149	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Ceramic Short, Very Light Migration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2984	3	164	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Ceramic Short, Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2983	2	545	Low Volt Disch, Normal Volt Chg, Burned Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2985	4	545	Low Volt Disch, Normal Volt Chg, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deterioration.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
85	15%	1.5	40°	428	4	8888	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	448	3	8947	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	455	2	9710	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
93	50%	24.0	40°	208	2	266	Low Volt Disch, Normal Volt Chg, Was Opened Up But Did Not Show Anything to be Wrong with Cell, Failure Due to Loss of Capacity.
			40°	204	1	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	209	3	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos and Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated.
			40°	210	4	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	211	5	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated, Plate Not Packed Evenly.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
96	40%	1.5	25°	445	3	3822	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	446	2	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	442	4	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
97	40%	3.0	25°	438	2	3894	Low Volt Disch, Low Volt Chg, Deposit on Pos and Neg Terminals, Pinpoint Penetration, Separator Deteriorated.
			25°	435	3	3946	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Deteriorated.
			25°	434	4	5002	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
99	25%	1.5	40°	429	3	3841	Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up.
			40°	432	2	3841	Failed During Shut Down of Pack, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
			40°	440	1	4853	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
100	25%	3.0	40°	427	3	4170	Shorted on Cycling, High Pressure Bulge, Still Under Pressure When Opened, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	431	2	4358	Shorted on Cycling, High Pressure Bulge, Still Under Pressure, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	436	1	4424	Shorted on Cycling, Migration of Neg Plate Material Through Separator, Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
29	15%	3.0	40°	3626	1	1418	Shorted on Cycling, Neg Tab Welds Poor, Active Plate Material Penetrated Separator at Scoring Marks.
			40°	810	7	4835	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Burn Spots Along Top Edge of Neg Plate, Hole Burned in Separator, Weak Weld Neg Tab to Plate.
			40°	4327	8	4340	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Score Band, Separator Completely Deteriorated.
			40°	6883	5	5581	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Weak Weld Neg Tab to Plate, Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	808	6	5975	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Leaked Lost 2.6 gm, Weak Neg Tab to Plate, Excess Scoring, Migration of Neg Plate Material, Short Through Separator at Center of Cell, Separator Deteriorated.
50	25%	1.5	0°C	4855	5	12069	Low Volt Disch, Low Volt Chg, Grid Wire Pierced Separator, Excess Scoring Migration of Neg Plate Material.
			0°C	4366	3	13500	Low Volt Disch, Low Volt Chg, Deposit on Terminal, Excess Scoring, Severe Migration Causing High Resistance Shorting Paths.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
73	25%	1.5	25°	396	3	1776	Low Volt Disch, Normal Volt Chg, Concave Side, Neg Ceramic Seal Broken, Lost 23.7 gm.
			25°	387	1	6120	Low Volt Disch, Low Volt Chg, Lost 13.2 gm, Separator Completely Deteriorated, Neg Plate Material Migration, Pinpoint Penetration, Blistering on Pos Plates, High Pressure Bulge.
			25°	465	4	7763	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Sides Concave, Migration of Active Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.
74	25%	3.0	25°	458	4	1184	Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.
			25°	419	3	1302	Low Volt Disch, Normal Volt Chg, Leaked, Lost 21.9 gm.
			25°	440	2	1754	Low Volt Disch, Normal Volt Chg, Leaked Around Both Terminals, Ceramic Broken on Neg Terminal, Lost 18.0 gm, Neg Plate Material Penetrated Separator, Sides Concaved, Shorting Case to Bus.
76	15%	1.5	40°	453	2	7697	Shorted on Cycling, Deposit on Neg Terminal, Ceramic Broken Around Neg Terminal, Extraneous Active Material Caused Short Between Plates, Separator Completely Deteriorated.
			40°	431	4	7698	Cell Shorted During Shut Down for Cell Removal, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Causing Shorts, Separator Completely Deteriorated.
			40°	455	3	9348	Shorted During Cycling, High Pressure Bulge, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated, Short on Upper Corner Near Neg Tab.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
87	40%	1.5	25°	468	1	163	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 8 gm.
			25°	388	2	208	Low Volt Disch, High Volt Chg, Lost 26.7 gm, Ceramic Short Around Pos Terminal.
			25°	394	3	627	Low Volt Disch, High Volt Chg, Lost 16.4 gm, High Pres Bulge, Deposit on Both Terminals, Ceramic Short Neg to Case.
			25°	454	4	627	Low Volt Disch, Low Volt Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave, Hit Bus on Both Sides.
			25°	386	5	627	Low Volt Disch, Low Volt Chg, Lost 18.1 gm, High Pres Bulge, Burnt Separator 5th or 6th Neg Plate Near Top, Ceramic Short.
88	40%	3.0	25°	422	2	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	404	1	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	466	3	358	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 16.4 gm.
			25°	429	5	358	Low Volt Disch, Low Volt Chg, Ceramic Short Around Pos Terminal.
90	25%	1.5	40°	452	4	2824	Low Volt Disch, Low Volt Chg, Short Through Separator at Top of Plates, High Pres Bulge on Sides, High Pres, Separator Deteriorated.
			40°	457	5	2824	Low Volt Disch, Normal Volt Chg, Short Through Separator, Blistering on Pos Plate, High Pres Bulge on Sides, High Pres.
			40°	378	3	4045	Normal Volt Disch, Went Dead on Chg During Cap Check, Ceramic Short, Separator Completely Deteriorated.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
91	25%	3.0	40°	395	4	2862	Shorted Out Following Capacity Check, Leaked, Lost 6.8 gm, Deposit on Both Terminals, Both Ceramic Seals Broken, Separator Completely Deteriorated, Neg Plate Material Migration, Separator Very Wet, Plastic Wrap Burned, Ceramic Short.
			40°	412	3	3385	Shorted on Cycling, High Pressure Bulge, Pos and Neg Plate Material on Separator, Separator Completely Deteriorated.
			40°	489	1	4480	Shorted During Cycling, Deposit on Both Terminals, Still Under Pressure When Opened, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	447	2	4480	Shorted During Cycling, Deposit on Neg Terminal, High Pressure Bulge, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
101	15%	1.5	0°	435	2	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.
			0°	407	5	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.
			0°	438	4	3629	Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.
115	25%	1.5	0°	490	3	2107	Low Volt Disch, Normal Volt Chg, Walls Concave, Busses Shorted to Case, Lost 26.9 gm.
			0°	508	2	2203	High Pres Bulge, Blisters on Pos Plate, Busses Shorted to Case.
			0°	467	4	2291	Black Deposit on Outside on Neg Terminal, High Pres Bulge, Busses Shorted to Case, Blisters on Pos Plate, Burnt Spot on Separator.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
104	25%	1.5	25°	69	1	2672	Low Volt Disch, Low Volt Chg, Shorted at Bottom on Pos Plate, Pos Grid Wire Penetrated Separator, Short at Top Between Pos Grid and Neg Tab, High Pressure.
			25°	R36	5	2826	Low Volt Disch, Low Volt Chg, Short Between Plates, Grid Wire Penetrated Separator, Pos Plate Material Between Plates, High Pressure.
			25°	5	3	2980	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Short Between Plates, High Pressure.
112	15%	1.5	40°	17	1	5005	Low Volt Disch, Low Volt Chg, Short Between Plates, Short About One Inch From Bottom of Plates, Separator Completely Deteriorated, High Pressure.
			40°	25	2	5005	Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.
			40°	38	5	5213	Low Volt Disch, Low Volt Chg, Short at Top Corner of Plate Where Pos Tabs are Connected to Plates, Separator Deteriorated Allowing Plates to Come Together, Blistering on Pos Plates.
118	40%	1.5	25°	61	2	1747	Low Volt Disch, Low Volt Chg, Short at Bottom of Pos Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure.
			25°	R91	4	1963	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure.
			25°	92	5	2937	Low Volt Disch, Low Volt Chg, Short Through Separator on Side of Plates, Pos Plate Material Penetrated Separator, High Pressure.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
119	40%	3.0	25°	73	5	222	Normal Volt Disch, Low Volt Chg, Short Near Bottom of 5th or 6th Pos, No Obvious Cause.
			25°	80	2	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
			25°	86	3	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
122	25%	3.0	40°	16	2	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	58	3	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	18	5	983	Low Volt Disch, Low Volt Chg, Plate Material Penetrated Separator, Pos Plates Blistered, High Pressure.
126	25%	1.5	40°	9	3	1273	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Neg Plate, Grid Wire Penetrated Separator, Several Other Plates Had Grid Wires Sticking Out, High Pressure.
			40°	R29	4	1509	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plate, Grid Wire Penetrated Separator, Blistering on Pos Plates, Separator Deteriorated, High Pressure.
			40°	11	5	1569	Low Volt Disch, Low Volt Chg, Shorted on Side of Pos Plate, Grid Wire Penetrated Separator, High Pressure.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
20	40%	3.0	25°	421	5	3704	Low Volt Disch, Low Volt Chg, Blistering on Bottom and Top Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	433	2	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated, Burned Pos Tab.
			25°	711	6	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated, Deposit on Pos Terminal.
			25°	710	3	4889	Shorted on Cycling, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
52	25%	1.5	0°	116	8	7858	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Neg Plate Material on Separator, Excess Migration of Neg Plate Material, Separator Deteriorated.
			0°	194	10	8367	Low Volt Disch, Normal Volt Chg, Under High Pressure When Opened, Pinpoint Penetration, Migration of Active Material Around Tab Areas.
			0°	108	7	9724	Low Volt Disch, High Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.
			0°	118	9	9724	Low Volt Disch, Low Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.
			0°	55	3	10994	Shorted on Cycling, Deposit Around Glass Seal, Pos Plate Material Piece of Extraneous Active Material Pierced Separator, Migration of Neg Plate Material, Separator Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
1	25%	1.5	25°	4361	4	2995	Low Volt Disch, High Volt Chg, Inclusion on Surface of Outside Pos Plate Wore Hole Through Separator and Thin Outside Wrap, Separator Sticking to Neg Plate, Glass Seal Leaked.
			25°	4335	1	4423	Low Volt Disch, High Volt Chg, Neg Tabs Weak Weld to Plates, Separator Melted at Center of Core, Extreme Pressure Points on Separator From Scoring Causing High Resistance Shorts.
			25°	4878	6	7782	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	4868	5	11361	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	4345	3	11745	Low Volt Disch, Normal Volt Chg, Weak Weld Neg Tab to Plate, Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	6802	10	11745	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Weak Weld Neg Tab to Plate, Short Caused By Excess Scoring, Migration of Neg Plate Material Separator Completely Deteriorated.
5	25%	3.0	25°	4351	2	3771	Low Volt Disch, High Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Neg Plate Material, Deep Pressure Points Resulting in Intermittant Shorts, Separator Deteriorated.
			25°	4354	3	5272	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Weak Tab To Plate Welds, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
6	40%	3.0	25°	6880	6	5211	Low Volt Disch, Normal Volt Chg, Weak Tab To Plate Welds, Excess Scoring Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	4324	8	1069	Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.
			25°	6904	10	1136	Low Volt Disch, Low Volt Chg, Small Hole in Separator at Start of Coil, Pos Plate Edge Broken Allowing Grid Wire to Penetrate Separator.
			25°	3637	4	1161	Grid Wires of Pos Plate Penetrated Separator and Shorted to Neg Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.
			25°	6875	9	3798	Low Volt Disch, Normal Volt Chg, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			25°	6882	7	4608	Low Volt Disch, Normal Volt Chg, Excess Scoring, Shorts at Edge of Plates, Neg Tab Area, and at Scoring, Weak Weld Neg Plate to Tab, Separator Deteriorated.
			25°	6880	6	5211	Low Volt Disch, Normal Volt Chg, Weak Tab to Plate Welds, Excess Scoring Migration of Neg Plate Material Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
49	15%	1.5	0°	6887	9	2010	Low Volt Disch, Low Volt Chg, Burn on Separator Opposite Pos Tab.
			0°	4370	3	10073	Shorted During Cycling, Short Through Separator Caused By Deep Pressure Points Adjacent to Scoring, Migration of Neg Plate Material, Small Inclusion on Plates Starting to Penetrate Through Separator.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
62	25%	1.5	0°	1630	10	2995	Low Volt Disch, High Volt Chg, Leaked, Lost 6.8 gm, Ceramic Seal Broke, Deposit on Inside of Ceramic, High Pres Bulge, Blistering on Pos Plates.
			0°	1792	4	4066	Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.
			0°	1806	5	4441	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	2227	7	8590	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Blistering on Pos Plates, Ceramic Short.
65	15%	3.0	0°	1284	4	5012	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Concave Sides, Edge of Pos Tab Shorted to Top of Neg Plates, Very Light Migration of Neg Plate Material, Blistering on Pos Plates.
			0°	2095	6	5706	Low Volt Disch, Low Volt Chg, Concave Sides Shorted Pos and Neg Bus to Case, Pinpoint Migration Through Separator, Blisters on Pos Plate, Separator Deteriorated.
			0°	1808	8	6186	Low Volt Disch, Low Volt Chg, Concave Sides Shorted Pos and Neg Bus to Case, Pos Plate Penetrated Separator and Shorted to Neg Plate, Pinpoint Migration Through Separator, Blisters on Pos Plates, Separator Deteriorated.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
98	25%	1.5	0°	77	5	3556	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.
			0°	47	1	8619	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Pieces of Loose Neg Plate Material Between Plates, Migration of Neg Plate Material, Separator Deteriorated, Short Through Separator at Bottom of Plates Where Tape Holds Plates Together.
			0°	14	4	10641	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Migration of Neg Plate Material, Short Between Pos and Neg, Separator Completely Deteriorated.
105	25%	3.0	25°	40	1	4306	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Deep Penetration by Blisters on Pos Plate, Separator Deteriorated.
			25°	23	3	5580	Low Volt Disch, Low Volt Chg, Deposit on Pos Term, Still Under Pressure When Opened, Migration of Neg Plate Material, Short Between Pos and Neg Plates, Separator Completely Deteriorated.
			25°	41	4	5690	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Weak Weld on Comb to Plate, Migration of Neg Plate Material, Separator Deteriorated.
108	15%	3.0	40°	81	2	4003	Shorted on Cycling, Still Under Pressure When Opened, Several Shorts Cuased by Small Pieces of Metal Between Plates, Blistering on Pos Plates, Separator Deteriorated.
			40°	82	3	4233	Shorted During Cycling, Still Under Pressure When Opened, Loose Pieces of Pos Plate Material Between Plates, Pinpoint Penetration, Blistering on Pos and Neg Plates, Separator Deteriorated, Short Between Pos Plate and Neg Tab at Top of Cell.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
77	15%	3.0	40°	462	2	5510	Shorted on Cycle, Deposit on Neg Term, Concave Sides, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	415	1	5684	Shorted on Cycle, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Short Between Pos and Neg Plates at Top of Plate, Separator Completely Deteriorated.
			40°	427	4	6032	Shorted on Cyle, Deposit on Pos and Neg Term, High Pressure Bulge, Migration of Neg Plate Material, Short Between Pos and Neg Plates, Separator Completely Deteriorated.
102	15%	3.0	0°	449	2	135	Volt Fell Suddenly at End of Chg, Burn Spots at Busses, Concave Around Spots, End Neg Pushed Into Pos Tab.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
82	25%	1.5	25°	430	2	7527	Low Volt Disch, Normal Volt Chg, Pierced Separator Caused By Rough Place at Top Edge of Neg Plate, Neg Plate Material Migrated, Separator Deteriorated.
			25°	397	5	10624	Low Volt Disch, Normal Volt Chg, Hot Spots Around Pin Point Penetration, Separator Completely Deteriorated.
			25°	437	1	10878	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Hot Spots Around Pin Point Penetration Separator Completely Deteriorated.
124	25%	1.5	0°	410	5	3037	Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It Was Put Back On Cycling in Same Pack.

CELL TYPE: Gulton 3.6 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
Sherfey	40%	1.5	25	106	2	2409	Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.9 gm., Loose Active Material Pos and Neg, Pinpoint Penetration, Separator Very Dry.
				111	3	3190	Low Volt Disch, Normal Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.0 gm, Weak Weld Neg Tab to Case, Loose Active Material Pos and Neg, Migration of Neg Plate Material, Blisters on Pos Plates, Separator Deteriorated.
				135	10	3472	Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 4.2 gm, Loose Active Material Neg, Migration of Neg Plate Material, Separator Deteriorated.
239	25%	1.5	25	134	6	2038	Low Volt Disch, Normal Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.5 gm, Pos Active Material Loose, Migration of Neg Plate Material, Blisters on Pos Plates, Separator Deteriorated.

CELL TYPE: General Electric 5.0 Ampere-Hour (NIMBUS)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
113	15%	1.5	40°	1-14	1	4998	Shorted on Cycling, Still Under Pressure When Opened, Short Between Pos Tab and Neg Plate Causing Thermal Runaway, Separator Dissolved.
			40°	1-17	2	4998	Shorted on Cycling, Still Under Pressure When Opened, Short Between Pos Tab and Neg Plate Causing Thermal Runaway, Separator Dissolved.
			40°	1-20	3	4998	Short on Cycling, Still Under Pressure When Opened, Short Between Pos Tab and Neg Plate Causing Thermal Runaway, Separator Dissolved.
			40°	1-29	4	4998	Shorted on Cycling, Still Under Pressure When Opened, Separator Dissolved.
			40°	1-35	5	4998	Shorted on Cycling, Still Under Pressure When Opened, Short Between Pos Tab and Neg Plate Causing Thermal Runaway, Separator Dissolved.

CELL TYPE: Gulton-General Electric 6.0 Ampere-Hour (Coulometer)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
338	25%	1.5	40°	2-58 G.E.	7	3780	Shorted on Cycling, High Pressure Bulge, Migration of Neg Plate Material, Short Between Plates Near Center of Plates, Separator Completely Deteriorated.
			40°	2-32 G.E.	6	3835	Low Volt Disch, Low Volt Chg, Deposit on Both Terminals, Migration of, Neg Plate Material, Short Through Separator at Top Center of Plates, Separator Completely Deteriorated.
			40°	2-59 G.E.	9	3835	Shorted on Cycle, High Pressure Bulge, Migration of Neg Plate Material, Short Through Separator at Top Center of Plates, Separator Completely Deteriorated.
			40°	2-50 G.E.	10	3835	Low Volt Disch, Normal Volt Chg, High Pressure Bulge, Migration of Neg Plate Material, Separator Deteriorated.

CELL TYPE: Sonotone 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
202	40%	1.5	25°	A3553	3	1630	Low Volt Disch, Normal Volt Chg, Cell Very Dry, Capacity Decay Due to Insufficient Electrolyte, Migration of Plate Material Around Tab and Scoring Areas.

CELL TYPE: Gulton 1.25 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
388	25	1.5	-20°	138	5	1897	Low Volt Disch, High Volt Chg, Loose Pos Plate Material, Neg Plate Migration, Blistering on Pos Plate, Separator Very Dry.

CELL TYPE: Gulton 4.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
214	40%	1.5	25	None	3	7564	Shorted on Cycling, Gassing When Opened, Concave Sides, Weak Weld on Pos Plates to Comb For 3-Plate Group, Migration and Separator Deteriorated Heavy Between 4-Plate Group.
				None	1	8474	Low Volt Disch, Low Volt Chg, High Pressure Bulge and Gassing, Weak Weld on Pos Plates to Comb for 3-Plate Group, Migration and Separator Deteriorated Heavy Between 4-Plate Group.
				None	5	8474	Low Volt Disch, Low Volt Chg, High Pressure Bulge and Gassing, Migration of Neg Plate Material, Separator Deteriorated.
240	25%	1.5	40°	None	4	*7900	Shorted on Cycling, Still Under Pressure When Opened, Weak Weld on Pos Plates to Comb For 3-Plate Group, Migration and Separator Deterioration Heavy Between 4-Plate Group, Short Between Pos and Neg Plates Near Bottom.
			40°	None	2	*10360	Low Volt Disch, Normal Volt Chg, Weak Weld on Pos Plates to Comb for 3-Plate Group Migration and Separator Deterioration Heavy Between 4-Plate Group.
			40°	None	3	*10360	Low Volt Disch, Normal Volt Chg, Weak Weld on Pos Plates to Comb for 3-Plate Group Migration and Separator Deterioration Heavy Between 4-Plate Group.
			40°	None	5	*10360	Low Volt Disch, Normal Volt Chg, Weak Weld on Pos Plates to Comb for 3-Plate Group Migration and Separator Deterioration Heavy Between 4-Plate Group.

CELL TYPE: Gulton 5.0 Ampere-Hour (NIMBUS)

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
127	15	1.5	40°	249	2	*7218	Low Volt Discharge, High Volt Chg, Pos Tab Pierced Separator, Migration of Neg Plate Material, Separator Completely Deteriorated.
128	25	1.5	40°	291	3	2422	Shorted During Cycling, Neg Plate Not Welded To Case, Loose Neg Plate Material at Center of Core, Migration of Neg Plate Material, Separator Deteriorated, Ceramic Short.
			40°	289	2	*5888	Shorted on Cycling Deposit on Pos Terminal Ceramic Short, Separator Completely Deterorated.
			40°	298	5	*6345	Low Volt Disch, High Volt Chg, Pos Tab Pierced Separator, Migration of Neg Plate Material, Separator Completely Deteriorated.
318	25	1.5	25°	278	2	4863	Shorted During Cycling, Pos Tab Touched Top of Neg Plate Shorting Out Cell, Burned Pos Tab, Weak Weld Neg Tab to Case, Migration of Neg Plate Material, Separator Deteriorated.

CELL TYPE: Gulton 5.6 Ampere-Hour (Folded Neoprene Seal)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
276	25%	1.5	25°	115	2	2025	Low Volt Disch, High Volt Chg, Deposit Around Top To Side Weld, Pos Tab Burned and Broken, Separator Deteriorated.
242	25%	1.5	40°	105	3	*3625	Low Volt Disch, Normal Volt Chg, Deposit Around Terminal and Top to Side Weld, Weak Weld Neg Terminal To Case, Migration of Neg Plate Material, Separator Completely Deteriorated, Lost 2.0 gm.
			40°	112	5	*3795	Low Volt Disch, Normal Volts Chg, Deposit Around Terminal and Top to Side Weld, Weak Weld Neg Terminal to Case, Pos Tab Burned, Pos Tab Shorted To Top of Neg Plate, Migration of Neg Plate Material, Separator Completely Deteriorated, Lot 4.2 gm.

CELL TYPE: Gulton 5.6 Ampere-Hour (Nonfolded Neoprene Seal)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
230	25%	1.5	40°	111	5	1195	Low Volt Disch, Low Volt Chg, Deposit Around Top to Side Weld, Leaked, Lost 1.6 gm, Weak Weld Pos Tab to Term, Migration of Neg Plate Material, Separator Deteriorated.
			40°	103	3	1196	Low Volt Disch, High Volt Chg, Still Under Pressure When Opened, Burned Pos Tab, Separator Deteriorated.
			40°	101	1	1275	Low Volt Disch, High Volt Chg, Sill Under Pressure When Opened, Pos Tab Burned and Broken, Migration of Neg Plate Material, Separator Deteriorated.
236	25%	1.5	25°	112	1	*2743	Low Volt Disch, High Volt Chg, Deposit Around Top to Side Weld, Leaked, Lost 3.5 gm, Weak Weld Neg Terminal to Case, Pos Tab Burned, Migration off Neg Plate Material, Separator Completely Deteriorated.

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CELL TYPE: Gulton 6.0 Ampere-Hour (HSI)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
218	40%	1.5	25°	5323	2	5364	Low Volt Disch, Low Volt Chg, Ceramic Short, Nickel Plating Flaked Off of Pos Term, Pinpoint Migration Through Separator Blisters on Pos Plates, Separator Deteriorated.
			25°	5324	3	7577	Low Volt Disch, Normal Volts Chg, Migration of Neg Plate Materia Blistering on Pos Plate, Separator Deteriorated.
			25°	5325	4	7577	Low Volt Disch, Normal Volts Chg, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Deteriorated.
238	25%	1.5	40°	5321	5	4350	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Pos Tab Burned, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Completely Deteriorated, Neg Plate Shorted Through Separator.
			40°	5318	2	5184	Low Volt Disch, Low Volt Chg, Deposit on Pos Term, Burned Pos Tab, Ceramic Short, Migration of Neg Plate Material, Blisters on Pos Plate, Separator Deteriorated.
			40°	5320	4	5766	Low Volt Disch, Normal Volt Chg, Burned Pos Tab, Ceramic Short, Migration of Neg Plate Material, Blisters on Pos Plate, Separator Deteriorated.

CELL TYPE: Gulton 6.0 Ampere-Hour (Third Electrode)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
11	25%	1.5	25°	147	3	2753	Third Electrode Shorted to Pos, Ceramic Short, Blistering on Pos Plates, Separator Deteriorated, Leaked, Lost 1.3 gm.
			25°	209	1	7743	Shorted on Cycling, Deposit on Both Terminals, Migration of Neg Plate, Blistering on Pos Plates, Short Between Pos and Neg Plate, Separator Completely Deteriorated.
			25°	162	2	7743	Low Volt Disch, High Volt Chg, Deposit on Both Terminals, Migration of Neg Plate Material, Blistering on Pos Plates, Separator Deteriorated and Dry.
47	25%	1.5	25°	153	5	5223	Shorted on Cycling, Deposit on Neg Term Seal, Under Pressure When Opened, Migration of Neg Plate Material, Blisters on Pos Plate, Short Through Separator Between Pos and Neg Plate Near Top of Cell, Separator Deteriorated.
59	25%	1.5	0°	140	3	3202	Third Electrode Shorted to Neg Plate, Migration of Neg Plate Material, Shorted Out Third Electrode, High Pressure Bulge, Still Under Pressure When Opened, Lost 1.4 gm.
71	40%	1.5	0°	130	5	2993	Low Volt Disch, High Volt Chg, Deposit on Neg Terminal, Leaked, Lost 8.7 gm, High Pressure Bulge, Large Deposits of Loose Active Neg Plate Material, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates.
			0°	141	4	5070	Low Volt Disch, High Volt Chg, Leaked, Lost 5.9 gm, Separator Very Dry, Migration of Neg Plate Material, Blisters on Pos Plates.

CELL TYPE: Gulton 12 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
290	25%	1.5	40°	1460	4	3340	Low Volt Disch, Low Volt Chg, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1459	3	3318	Shorted on Cycling, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1461	5	5124	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
296	40%	1.5	25°	1447	4	5036	Low Volt Disch, Normal Volt Chg, Piece of Loose Neg Plate Material Between Plates, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			25°	1443	2	5152	Shorted on Cycling, High Pressure Bulge, Blistering on Pos Plates, Separator Completely Gone, Hottest Point Near Center of Pack, All Insulators Burned, Leaked, Lost 3.3 gm.
			25°	1445	3	5152	Low Volt Disch, Low Volt Chg, Deposit on Both Terminals, High Pressure Bulge, Migration of Neg Plate Material, Short Through Separator Near Center of Plate, Separator Completely Deteriorated.

CELL TYPE: Gulton 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
301	25%	1.5	0°	1455	4	5586	Low Volt Disch, High Volt Chg, High Pressure Bulge, Leaked, Lost 9.6 gm, Migration of Neg Plate Material, Blisters on Pos Plates, Separator Very Dry.

CELL TYPE: Gulton 50 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
95	25%	1.5	0°	109	3	2643	Shorted Out While Cycling, All Plates Shorted at Bottom Center, Separator Very Dry and Stiff From Heat, Blistering on Pos Plate.
			0°	107	5	2938	Shorted Out While Cycling, Short Between Plates at Center Near Bottom of Plates, Separator Dry, Small Amount of Neg Plate Material Migration on Separator.
			0°	115	1	3227	Low Volt Disch, High Volt Chg, Separator Impregnated with Neg Plate Material, Large Blisters on Pos Plate, One Neg Plate Stuck to Can.
123	15%	1.5	40°	119	2	1873	Low Volt Disch, Low Volt Chg, Separator Decomposed, Hot Spots Through Separator Shorted Out Several Plates, High Pres Bulge, Still Under Pressure When Opened.
			40°	118	3	1873	Went Dead During Shutdown, Separator Decomposed, Several Small Hot Spots on Each Plate, Outside Neg Plates Stuck to Case, High Pres Bulge, Deposit Around Ceramic Seal of Pos Terminal.
			40°	117	4	1873	Went Dead During Shutdown, Separator Decomposed, Neg Plate Stuck to Case, High Pres Bulge, Still Under Pressure When Opened.

CELL TYPE: Yardney 12 Ampere-Hour

FAILURE ANALYSIS: Silver-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
33	50%	24.0	40°		3	58	Leaked, Dried Out.
			40°		2	126	Leaked, Dried Out.
			40°		1	152	Leaked, Dried Out.
			40°		8	197	Leaked, Dried Out.
			40°		4	210	Leaked, Dried Out.
			40°		10	210	Leaked, Dried Out.
57	50%	24.0	0°		1	162	Leaked, Electrolyte Shorted Out Cell.
			0°		2	162	Leaked, Electrolyte Shorted Out Cell.
			0°		10	162	Leaked, Electrolyte Shorted Out Cell.
			0°		3	166	Leaked, Electrolyte Shorted Out Cell.
			0°		4	166	Leaked, Electrolyte Shorted Out Cell.
			0°		5	166	Leaked, Electrolyte Shorted Out Cell.
			0°		6	166	Leaked, Electrolyte Shorted Out Cell.
			0°		7	166	Leaked, Electrolyte Shorted Out Cell.
			0°		8	166	Leaked, Electrolyte Shorted Out Cell.
			0°		9	166	Leaked, Electrolyte Shorted Out Cell.

CELL TYPE: Delco 25 Ampere-Hour

FAILURE ANALYSIS: Silver-Zinc

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
75	40%	24.0	25°			32	Cell Blew Up, Pack Returned to Manufacturer.
89	40%	24.0	25°			80	Returned to Manufacturer for Analysis.
288	40%	3.0	25°			120	Returned to Manufacturer for Analysis.

CELL TYPE: Delco 40 Ampere-Hour

FAILURE ANALYSIS: Silver-Zinc

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
275	25%	24.0	25°			139	Returned to Manufacturer for Analysis.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
G.E. 3 A.H.	63	1.5	15	0	3.48		3.18	3.12	3.05	3.03	3.05	2.90	3.30	3.50	
	64		25	0	3.50		3.33	3.70	3.38	3.35	3.42	3.27	3.12	2.80	
	15		25	25	4.00		3.38	2.93	2.33	1.95	1.49	1.15	1.10	----	10382
	16		40	25	4.08		2.75	2.10	1.35	----	----	----	----	----	5013
	39		15	50/40	1.65	2.43 (779)	2.10	1.53	1.25	1.17	0.70	----	----	----	8109
	40		25	50/40	1.80	2.50 (1440)	0.88**	0.88	----	----	----	----	----	----	2509
G.E. 3 A.H.	67	3	15	0	3.63		3.25	3.40	3.53	2.97	3.25	2.95	3.04	3.08	
	68		25	0	3.50		3.35	3.53	3.40	3.27	3.25	2.93	2.87	3.20	
	19		25	25	3.93		3.78	3.48	3.15	3.00	2.78	2.48	2.29	2.20	
	20		40	25	3.78		3.00	2.35	2.07	1.83	2.00	1.62	1.47	1.20	5410
	43		15	50/40	1.77	2.63 (320)	2.20	1.61	1.65	----	----	----	----	----	2656
	44		25	50/40	1.60	2.00 (327)	1.35	1.19	1.15	1.10	0.95	0.88	----	----	4487
Gould 3.5 A.H.	51	1.5	15	0	3.62		4.00	3.33	3.41	3.21	3.35	3.15	3.47	3.00	
	52		25	0	3.33		3.85	3.53	3.18	3.30	3.24	2.80	2.65	2.96	
	3		25	25	4.00		3.82	2.92	2.25	----	----	----	----	----	4751
	4		40	25	3.94		3.38	2.27	----	----	----	----	----	----	3164
	27		15	50/40	1.53	2.63 (779)	2.07	1.95	1.90	----	----	----	----	----	4485
	28		25	50/40	1.55	2.07 (424)	2.86	----	----	----	----	----	----	----	1811
Gould 3.5 A.H.	55	3	15	0	3.27		3.59	3.15	3.38	3.33	3.27	3.03	2.77	3.73	
	56		25	0	3.50		3.91	3.53	3.65	3.41	3.38	3.30	3.27	3.24	
	7		25	25	4.32		4.03	3.79	3.53	2.77	2.28	2.51	----	----	4173
	8		40	25	4.29		3.65	3.35	3.03	----	----	----	----	----	2494
	31		15	50/40	1.60	1.31 (328)	1.75	1.98	2.16	----	----	----	----	----	2524
	32		25	50/40	1.55	1.66 (495)	1.49	----	----	----	----	----	----	----	975

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
** Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAYS INTERVALS										CYCLES TO PACK FAILURE
					INITIAL	*(See Note)	NINTH 88 DAYS	TENTH 88 DAYS	ELEVENTH 88 DAYS	TWELFTH 88 DAYS	THIRTEENTH 88 DAYS	FOURTEENTH 88 DAYS	FIFTEENTH 88 DAYS	SIXTEENTH 88 DAYS	SEVENTEENTH 88 DAYS	
G.E.	63	1.5	15	0			3.10	2.65	2.40							
3 A.H.	64		25	0			2.70	2.85	2.60							
	15		25	25												10382
	16		40	25												5013
	39		15	50/40												8109
	40		25	50/40												2509
G. E.	67	3	15	0			2.95									
3 A.H.	68		25	0			2.78	2.75								
	19		25	25			1.88	2.00	1.60							
	20		40	25												5410
	43		15	50/40												2656
	44		25	50/40												4487
Gould	51	1.5	15	0			2.83	3.21	2.92							
3.5 A.H.	52		25	0			2.42									
	3		25	25												4751
	4		40	25												3164
	27		15	50/40												4495
	28		25	50/40												1811
Gould	55	3	15	0			2.60	3.15								
3.5 A.H.	56		25	0			2.92	2.83								
	7		25	25												4173
	8		40	25												2494
	31		15	50/40												2524
	32		25	50/40												975

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Sonotone 5 A.H.	49	1.5	15	0	5.45		5.54	5.50	4.96	4.79	4.71	4.50	4.54	4.08	
	50		25	0	5.04		4.96	4.58	4.25	3.79	3.67	3.67	3.46	3.25	
	1		25	25	5.42		3.67	2.33	2.88	2.79	2.21	2.58	2.80	2.46	11745
	2		40	25	6.42		4.38	4.17	3.25	3.00	----	----	----	----	6671
	25		15	50/40	3.08	3.63 (703)	2.25	1.83	2.04	1.17	1.17	1.54	0.83	----	9328
	26		25	50/40	3.17	3.17 (445)	2.75	2.93	----	----	----	----	----	----	3625
Sonotone 5 A.H.	53	3	15	0	5.67		5.79	5.67	5.42	5.33	5.50	5.54	5.00	4.62	
	54		25	0	4.92		3.96	3.96	4.13	3.96	3.75	3.29	3.38	3.13	
	5		25	25	5.71		4.58	3.04	2.04	2.13	2.13	2.08	2.21	3.25	
	6		40	25	5.83		4.50	3.29	3.25	2.92	2.33	2.33	2.00	2.13	5211
	29		15	50/40	3.33	4.92 (223)	2.75	2.38	2.42	2.08	1.96	1.29	1.79	----	5975
	30		25	50/40	3.75	3.50 (183)	1.88	2.88	2.38	1.67	1.21	----	----	----	4141
Gulton 6 A.H.	61	1.5	15	0	5.00		5.10	5.40	4.45	3.15	2.60	2.15	1.75	----	10146
	62		25	0	5.00		4.75	3.80	4.35	3.55	3.30	3.30	3.95	3.85	
	13		25	25	5.80		2.75	2.85	2.70	----	----	----	----	----	4021
	14		40	25	6.40		3.45	----	----	----	----	----	----	----	2086
	37		15	50/40	2.75	3.60 (239)	1.70	2.95	1.85	2.00	----	----	----	----	6064
	38		25	50/40	2.65	2.90 (114)	1.55	----	----	----	----	----	----	----	1377
Gulton 6 A.H.	65	3	15	0	4.50		5.45	5.35	5.15	4.50	4.50	5.15	4.20	4.10	
	66		25	0	4.25		5.00	3.50	2.50	3.80	3.90	3.45	----	----	4414
	17		25	25	5.80		3.65	3.45	2.50	2.30	----	----	----	----	2885
	18		40	25	4.55		4.95	3.16	----	----	----	----	----	----	1550
	41		15	50/40	2.75	4.55 (289)	2.05	1.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1689
	42		25	50/40	2.60	3.80 (96)	2.15	2.10	2.35	1.85	1.50	1.30	----	----	4133

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
					NINTH 88 DAYS	TENTH 88 DAYS	ELEVENTH 88 DAYS	TWELFTH 88 DAYS	THIRTEENTH 88 DAYS	FOURTEENTH 88 DAYS	FIFTEENTH 88 DAYS	SIXTEENTH 88 DAYS	SEVENTEENTH 88 DAYS	EIGHTEENTH 88 DAYS	NINETEENTH 88 DAYS	
Sonotone 5 A.H.	49	1.5	15	0	4.04	4.13										
	50		25	0	3.58	3.33	3.13									
	1		25	25	---	---	---	---	---	---	---	---	---	---	---	11745
	2		40	25	---	---	---	---	---	---	---	---	---	---	---	6671
	25		15	50/40	---	---	---	---	---	---	---	---	---	---	---	9328
	26		25	50/40	---	---	---	---	---	---	---	---	---	---	---	3625
Sonotone 5 A.H.	53	3	15	0	4.17	4.63										
	54		25	0	2.50	2.75	2.50									
	5		25	25	3.42	3.67										
	6		40	25	---	---	---	---	---	---	---	---	---	---	---	5211
	29		15	50/40	---	---	---	---	---	---	---	---	---	---	---	5975
	30		25	50/40	---	---	---	---	---	---	---	---	---	---	---	4141
Gulton 6 A.H.	61	1.5	15	0	---	---	---	---	---	---	---	---	---	---	---	
	62		25	0	3.95	3.80	3.50									10146
	13		25	25	---	---	---	---	---	---	---	---	---	---	---	4021
	14		40	25	---	---	---	---	---	---	---	---	---	---	---	2086
	37		15	50/40	---	---	---	---	---	---	---	---	---	---	---	6064
	38		25	50/40	---	---	---	---	---	---	---	---	---	---	---	1377
Gulton 6 A.H.	65	3	15	0	4.05	3.70										
	66		25	0	---	---	---	---	---	---	---	---	---	---	---	4414
	17		25	25	---	---	---	---	---	---	---	---	---	---	---	2985
	18		40	25	---	---	---	---	---	---	---	---	---	---	---	1550
	41		15	50/40	---	---	---	---	---	---	---	---	---	---	---	1698
	42		25	50/40	---	---	---	---	---	---	---	---	---	---	---	4133

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
G.E. 12 A.H.	110	1.5	15	0	13.9		12.7	10.4	13.0	12.5	14.1	13.7	14.3	13.1	
	124		25	0	14.2		13.5	12.9	12.8	11.4	11.5	11.7	10.8	8.40	
	82		25	25	15.2		8.00	5.55	5.50	5.40	5.70	5.00	4.90	-----	10828
	96		40	25	14.8		6.00	7.65	-----	-----	-----	-----	-----	-----	4020
	85		15	50/40	6.80	8.20 (334)	5.00	4.70	5.00	4.90	5.00	1.90	4.30	----	9710
	99		25	50/40	6.90	6.00 (195)	4.90	5.20	4.40	-----	-----	-----	-----	-----	4853
G.E. 12 A.H.	111	3	15	0	14.2		13.2	10.7	11.0	12.1	12.9	12.0	11.4	11.2	
	125		25	0	14.6		13.0	12.1	11.9	12.2	12.9	11.7	11.2	11.3	
	83		25	25	15.2		11.7	8.20	6.13	5.20	4.80	4.40	5.10	5.60	
	97		40	25	14.9		5.60	5.86	7.90	8.20	6.80	5.50	5.70	----	5002
	86		15	50/40	7.10	8.20 (205)	6.30	3.70	4.00	3.50	2.90	2.30	4.40	3.70	
	100		25	50/40	7.00	9.80 (70)	3.80	4.70	5.70	5.10	4.00	4.00	-----	-----	4424
Gould 20 A.H.	84	1.5	15	0	22.5		27.7	26.5	24.2	24.7	21.7	22.3	19.8	19.0	
	98		25	0	23.1		21.2	15.2	18.7	17.2	17.5	13.5	13.5	----	10641
	104		25	25	25.0		18.5	14.0	-----	-----	-----	-----	-----	-----	2980
	118		40	25	24.7		23.3	-----	-----	-----	-----	-----	-----	-----	2937
	112		15	50/40	9.67	6.83 (183)	15.7	15.3	12.5	12.4	-----	-----	-----	-----	5213
	126		25	50/40	9.00	13.9 (1326)	15.2	-----	-----	-----	-----	-----	-----	-----	1594
Gould 20 A.H.	80	3	15	0	23.0		23.2	21.5	20.3	25.8	19.7	18.3	16.7	16.5	
	94		25	0	23.0		17.5	25.0	18.2	18.8	16.8	17.0	15.8	15.8	
	105		25	25	23.3		23.5	22.2	21.3	21.2	20.7	10.5	20.5	14.3	5690
	119		40	25	24.8		24.7	21.7	-----	-----	-----	-----	-----	-----	1793
	108		15	50/40	9.50	9.67 (497)	11.8	14.8	10.8	15.2	12.3	-----	-----	-----	4273
	122		25	50/40	9.33	7.50 (756)	8.17**	-----	-----	-----	-----	-----	-----	-----	983

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

** Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
					NINTH 88 DAY	TENTH 88 DAY	ELEVENTH 88 DAY	TWELVETH 88 DAY	THIRTEENTH 88 DAY	FOURTEENTH 88 DAY	FIFTEENTH 88 DAY	SIXTEENTH 88 DAY	SEVENTEENTH 88 DAY	EIGHTEENTH 88 DAY	NINETEENTH 88 DAY	
G.E. 12 A.H.	110	1.5	15	0	11.9	12.0										
	124		25	0	7.20	10.5										
	82		25	25	—	—	—	—	—	—	—	—	—	—	—	10828
	96		40	25	—	—	—	—	—	—	—	—	—	—	—	4020
	85		15	50/40	—	—	—	—	—	—	—	—	—	—	—	9710
	99		25	50/40	—	—	—	—	—	—	—	—	—	—	—	4853
G.E. 12 A.H.	111	3	15	0	10.0	10.3										
	125		25	0	10.9	10.9										
	83		25	25	7.20	6.80										
	97		40	25	—	—	—	—	—	—	—	—	—	—	—	5002
	86		15	50/40	3.10	3.40	2.90									
	100		25	50/40	—	—	—	—	—	—	—	—	—	—	—	4424
Gould 20 A.H.	84	1.5	15	0	18.5	16.3										
	98		25	0	—	—	—	—	—	—	—	—	—	—	—	10641
	104		25	25	—	—	—	—	—	—	—	—	—	—	—	2980
	118		40	25												2937
	112		15	50/40												5213
	126		25	50/40												7574
Gould 20 A.H.	80	3	15	0	17.2	15.0										
	94		25	0	14.7	15.2										
	105		25	25												5690
	119		40	25												1793
	108		15	50/40												4273
	122		25	50/40												983

*Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
**Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Gulton 20 A.H.	101	1.5	15	0	17.2		12.5	5.67	-----	-----	-----	-----	-----	-----	3631
	115		25	0	17.7		11.2	-----	-----	-----	-----	-----	-----	-----	2288
	73		25	25	23.3		7.17	9.50	7.83	8.67	8.83	-----	-----	-----	7763
	87		40	25	23.3		-----	-----	-----	-----	-----	-----	-----	-----	627
	76		15	50/40	10.3	13.8 (172)	6.50	4.83	5.50	4.67	5.00	5.17	-----	-----	9348
	90		25	50/40	9.00	11.3 (65)	6.00	10.3	7.33**	-----	-----	-----	-----	-----	4045
Gulton 20 A.H.	102	3	15	0	16.7		18.8	25.2	20.3	19.5	17.3	17.0	15.0	14.8	
	116		25	0	21.7		20.7	21.8	19.3	17.5	15.2	15.8	13.5	13.2	
	74		25	25	20.3		6.17	7.17	-----	-----	-----	-----	-----	-----	1754
	88		40	25	19.8		-----	-----	-----	-----	-----	-----	-----	-----	358
	77		15	50/40	9.50	12.7 (71)	7.33	5.33	4.83	5.33	4.67	5.00	5.17	6.16	6032
	91		25	50/40	9.17	10.3 (47)	6.67	6.67	7.67	6.83	7.17	5.50			4480
Yardney 12 A.H.	57	24	50	0	13.8		8.60	-----	-----	-----	-----	-----	-----	-----	166
	33		50	40	13.5		12.0	-----	-----	-----	-----	-----	-----	-----	210
Gulton 6 A.H.	79	24	50	25	6.60		3.55	4.40	4.25	4.05	3.50				545
								(40°C)	(40°C)						
G.E. 12 A.H.	93	24	50	40***	13.0		7.60	6.50	5.00	-----	-----	-----	-----	-----	349
Gulton 50 A.H.	95	1.5	25	0	54.6		59.6	45.4	-----	-----	-----	-----	-----	-----	3227
	123		15	40	27.9										1874

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
** Two cells only; pack failed during capacity check.
*** Changed from 25° to 40° C ambient after 173 cycles.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS											CYCLES TO PACK FAILURE
					NINTH 88 DAYS	TENTH 88 DAYS	ELEVENTH 88 DAYS	TWELFTH 88 DAYS	THIRTEENTH 88 DAYS	FOURTEENTH 88 DAYS	FIFTEENTH 88 DAYS	SIXTEENTH 88 DAYS	SEVENTEENTH 88 DAYS	EIGHTEENTH 88 DAYS	NINETEENTH 88 DAYS	
Gulton 20 A.H.	101	1.5	15	0												
	115		25	0												
	73		25	25												
	87		40	25												
	76		15	50/40												
	90		25	50/40												
Gulton 20 A.H.	102	3	15	0	10.1	10.0										
	116		25	0	13.0	12.0										
	74		25	25												
	88		40	25												
	77		15	50/40												
	91		25	50/40												
Yardney 12 A.H.	57	24	50	0												
	33		50	40												
Gulton 6 A.H.	79	24	50	25												
G.E. 12 A.H.	93	24	50	40												
Gulton 50 A.H.	95	1.5	25	0												
	123		15	40												

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Sonotone (Triple Sealed) 3 A.H.	243	1.5	15	0	3.23	3.55	3.47	3.50	3.50	3.40	3.42	3.27				
	231		25	0	2.88	3.05	2.78	2.72	2.72	2.67	2.27	2.12				
	203		25	25	3.35	1.40	1.17	1.50	1.45	1.28						
	202		40	25	3.60	1.32	1.45	1.62								5389
	226		15	40	3.53	1.10	1.40	.90	0.47							
	237		25	40	3.48	1.05	1.05	1.05								5625
Sonotone (Stabistor) 5 A.H.	175	1.5	25	-20	4.92	1.42										2145
	289		40	-20	4.96	3.13										1530
	92		25	0	3.38	2.92	1.75	1.25	1.17							
	322		40	0	4.13	2.42	2.63	1.63	1.75							
	273		25	25	5.33	2.33	1.29									3742
	287		40	25	5.50	3.66										2392
	299		25	40	4.21	1.88	1.50	1.17								4388
	312		40/15	40	3.71	1.04	0.54									3294

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AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI-TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Comm.) 4 A.H.	315	1.5	15	0	5.04	3.57	4.03	4.00	3.80	4.07	4.03	4.60	4.07			
	326		25	0	4.87	4.00	3.87	3.73	3.60	3.60	3.93	3.03	3.63			
	204		25	25	4.63	2.47	2.07	1.83	1.80	3.67	1.83	1.70	1.60	1.60		
	214		40	25	5.00	2.00	2.07	1.87	1.93	1.93	1.67					8474
	228		15	40	4.20	1.77	1.67	1.47	1.53	1.93	1.75	1.67	1.70			
	240		25	40	3.37	1.17	1.13	1.30	1.03	1.30	1.01	1.00				10360
Gulton 12 A.H.	216	1.5	15	0	14.0	14.0	14.1	14.2	13.7	13.7	12.4					
	301		25	0	14.2	14.5	14.4	14.2	13.0	11.9	11.0					
	227		25	25	14.1	5.90	3.50	4.10	4.20	4.80	5.10					
	296		40	25	13.3	4.70	5.40	5.00								5152
	78		15	40	6.80	4.30	3.10	3.30	3.40	3.40	3.20	5.30				
	290		25	40	11.4	5.40	3.60	3.70								5124
Gulton (HSI) 6 A.H.	213	1.5	25	0	7.30	7.30	7.25	7.20	7.00	6.75	6.75					
	218		40	25	6.90	3.00	3.60	3.80	3.05							7577
	238		25	40	5.00	1.75	2.90	1.85	2.80							5766
Yardney (AgZn)	9	24	42	25	14.0											57

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Nimbus) 5 A.H.	117	1.5	15	0	5.00	5.17	5.46	5.17	4.75	4.75						
	121		25	0	5.38	5.38	5.33	5.00	4.46	4.29						
	120		15	25	5.25	5.40	4.17	2.79	2.37	2.08						
	318		25	25	5.46	2.55	1.67	1.50	1.67	2.00						
	127		15	40	3.29	1.67	1.50	1.38	1.42	1.70						
	128		25	40	3.04	1.42	1.54	1.71	1.83							6345
Gulton 6 A.H. (Third elec-trode)	59	1.5	25	0	7.15	7.00	6.20	6.75	6.50	6.85						
	71		40	0	7.25	7.50	7.00	5.65								5754
	11		40	25	7.10	3.15	6.20	4.35	3.95	2.75						7743
	23		25	25	5.95	3.85	5.20	4.00	4.45	4.20	3.85					
	35		15	40	2.95	2.25	1.60	1.85	2.00	2.75						
	47		25	40	3.95	2.10	2.05	2.25								5521
G.E. (Nimbus) 5 A.H.	103	1.5	15	0	5.42	5.08	5.38	5.58	5.42	5.54						
	107		25	0	5.21	5.50	5.46	5.33	5.17	5.42						
	106		15	25	4.67	4.13	4.13	3.50	3.50	3.21	3.08	3.04				
	304		25	25	5.58	3.58	2.54	2.54	1.75	2.04	2.00					
	113		15	40	3.67	2.42	2.25	1.83								4998
	114		25	40	3.83	2.25	1.71	1.71	1.63	1.42						
G.E. 12 A.H. (Third elec-trode)	60	1.5	25	0	15.0	15.1	14.6									
	72															
	12		25	25	10.2											1698
	24		40	25	9.10											665
	36															
	48		25/40	40/0	5.30* 15.2	15.1	11.5									

* At 40° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS									CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Neoprene seal - folded) 5.6 A.H.	244	1.5	25	-20	4.01	4.67	4.34								
	200		25	0	6.25	5.32	5.09	4.85							
	276		25	25	5.60	1.63	1.59	1.54							
	242		25	40	4.39	1.49	1.35								3798
Gulton (Neoprene seal non-folded) 5.6 A.H.	232	1.5	25	-20	4.53	4.57	4.67								
	390		25	0	6.55	5.88	5.50	5.27							
	396		25	25	6.30	2.33	2.24	1.87							
	230		25	40	4.90	[illegible]	[illegible]								1275
Yardney (C-3 Separator) 5 A.H.	257	24	20	0	3.67	1.83	1.33								267
	21		20	25	4.93	.76									98
	45		20	40	6.02										61
Yardney (Radiated Separator) 5 A.H.	409		20	25	5.25										
	233		20	25	5.20	5.85	6.13	6.35	5.48						34
Yardney (Pellon Control Separator) 5 A.H.	69		20	25	5.38	4.95	4.17	3.20	4.42						

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
					INITIAL PRECONDI-TIONING	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Delco. (Silver-Zinc) 25 A.H.	609	24	40	25	29.7	30.5	22.3									119
Gulton (Neoprene seal folded) 3.6 A.H.	239	1.5	40	25	3.06	2.07	2.01	2.55	1.71							
Yardney (Silver-Cadimum) 12 A.H.	185	1.5	25	-20	8.70	1.30	13.7	9.60								214
	197		25	0	14.2	2.00	3.50	5.70								
	182		25	25	4.50	5.40	4.20									

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Gulton 1.25 A.H.	174	1.5	25	-20	1.43		0.54	0.42							
	308		25	0	1.78		1.76	1.69							
	198		60	0	1.83		1.60	1.53							
	388		25	-20	1.28		0.52	0.52							
G.E. 5A.H. Gulton 6A.H.	338	1.5	25	40	4.60										
Yardney 11 A. H.	21B	24	40	25	11.46										
	45B	24	40	0	9.26										
Gulton 6 A. H.	18C	3	25	25	7.00										
	29B	3	25	40	6.25										
	41B	3	25	-20	6.60										
	66B	3	25	0	7.15										
Yardney 16 A. H.	57C	24	31	25	17.08										
E. S. B.	1B	8	25	25	12.67										
Gulton 12 A. H.	11B	1.5	40	25	14.20										

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
G.E. NICD	3	16A	25	0.5	1.0	40	125	1.49	12-5-63	FAILED	5,013		10	11-18-65	
		64A	0	0.5	1.0	25	115	1.55	12-5-63	17572	18017	445	10	10	10
		15A	25	0.5	1.0	25	125	1.49	12-6-63	FAILED	10,382		10	11-6-65	
Pages		63A	0	0.5	1.0	15	115	1.55	12-6-63	17285	17684	399	10	9	9
		39A	40	0.5	1.0	15	160	1.45	12-12-63	FAILED	8,109		10	6-19-65	
		40A	40	0.5	1.0	25	160	1.45	12-12-63	FAILED	2,509		10	7-9-64	
		19A	25	0.5	2.5	25	125	1.49	12-20-63				10		
		20A	25	0.5	2.5	40	125	1.49	12-20-63	FAILED	5,410		10	1-8-66	
		43A	40	0.5	2.5	15	160	1.45	12-20-63	FAILED	2,652		10	12-26-64	
89-92		44A	40	0.5	2.5	25	160	1.45	12-20-63	FAILED	4,487		10	9-30-65	
		67A	0	0.5	2.5	15	115	1.55	12-20-63	8618	8840	222	10	10	10
		68A	0	0.5	2.5	25	115	1.55	12-20-63	8801	9023	222	10	9	9
GOULD NICD	3.5	4A	25	0.5	1.0	40	125	1.49	12-5-63	FAILED	3,164		10	7-9-64	
		52A	0	0.5	1.0	25	115	1.55	12-5-63	FAILED	13,728		10	6-11-66	
		3A	25	0.5	1.0	25	125	1.49	12-6-63	FAILED	4,751		10	10-31-64	
18		51A	0	0.5	1.0	15	115	1.55	12-6-63	17444	17843	399	10	9	9
Pages		27A	40	0.5	1.0	15	160	1.45	12-12-63	FAILED	4,485		10	11-6-64	
		28A	40	0.5	1.0	25	160	1.45	12-12-63	FAILED	1,811		10	6-2-64	
93-95		7A	25	0.5	2.5	25	125	1.49	12-20-63	FAILED	4,173		10	7-26-65	
		8A	25	0.5	2.5	40	125	1.49	12-20-63	FAILED	2,494		10	11-29-64	
		31A	40	0.5	2.5	15	160	1.45	12-20-63	FAILED	2,517		10	1-4-65	
		32A	40	0.5	2.5	25	160	1.45	12-20-63	FAILED	975		10	6-10-64	
		55A	0	0.5	2.5	15	115	1.55	12-20-63	8669	8841	172	10	10	10
		56A	0	0.5	2.5	25	115	1.55	12-20-63	8943	9165	222	10	10	10
SONOTONE NICD	5	1A	25	0.5	1.0	25	125	1.49	12-12-63	FAILED	11,745		10	2-27-66	
		2A	25	0.5	1.0	40	125	1.49	12-12-63	FAILED	6,671		10	5-20-65	
		25A	40	0.5	1.0	15	160	1.45	12-17-63	FAILED	9,328		10	10-31-65	
Pages		26A	40	0.5	1.0	25	160	1.45	12-17-63	FAILED	3,625		10	10-15-64	
		50A	0	0.5	1.0	25	115	1.55	12-17-63	16622	17070	448	10	7	7
96-100		5A	25	0.5	2.5	25	125	1.49	12-31-63	8381	8605	224	10	8	8
		6A	25	0.5	2.5	40	125	1.49	12-31-63	FAILED	5,211		10	12-13-65	
		29A	40	0.5	2.5	15	160	1.45	12-31-63	FAILED	5,975		10	4-17-66	
		30A	40	0.5	2.5	25	160	1.45	12-31-63	FAILED	4,141		10	8-7-65	
		49A	0	0.5	1.0	15	115	1.55	12-31-63	17217	17665	448	10	8	8
		53A	0	0.5	2.5	15	115	1.55	12-31-63	8510	8734	224	10	10	10
		54A	0	0.5	2.5	25	115	1.55	12-31-63	8470	8694	224	10	10	10

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON NICD	6	13A	25	0.5	1.0	25	125	1.49	12-30-63	FAILED	4,021		10	11-11-64	
		37A	40	0.5	1.0	15	160	1.45	12-30-63	FAILED	6,064		10	4-14-65	
Pages		61A	0	0.5	1.0	15	115	1.55	12-30-63	FAILED	10,146		10	12-17-65	
		62A	0	0.5	1.0	25	115	1.55	12-30-63	16896	17344	448	10	6	6
101-102		14A	25	0.5	1.0	40	125	1.49	12-31-63	FAILED	2,086		10	6-19-64	
		17A	25	0.5	2.5	25	125	1.49	12-31-63	FAILED	2,885		10	1-31-65	
		18A	25	0.5	2.5	40	125	1.49	12-31-63	FAILED	1,550		10	8-18-64	
		38A	40	0.5	1.0	25	160	1.45	12-31-63	FAILED	1,377		10	5-22-64	
		41A	40	0.5	2.5	15	160	1.45	12-31-63	FAILED	1,689		10	9-14-64	
		42A	40	0.5	2.5	25	160	1.45	12-31-63	FAILED	4,133		10	8-23-65	
		65A	0	0.5	2.5	15	115	1.55	12-31-63	8321	8545	224	10	8	8
		66A	0	0.5	2.5	25	115	1.55	12-31-63	FAILED	4,414		10	8-31-65	
G.E. NICD	12	82A	25	0.5	1.0	25	125	1.49	1-4-64	FAILED	10,878		5	12-30-65	
		83A	25	0.5	2.5	25	125	1.49	1-4-64				5		
Pages		96A	25	0.5	1.0	40	125	1.49	1-4-64	FAILED	4,020		5	10-2-64	
		97A	25	0.5	2.5	40	125	1.49	1-4-64	FAILED	5,002		5	11-8-65	
		110A	0	0.5	1.0	15	115	1.55	1-4-64	17003	17451	448	5	5	5
103-107		111A	0	0.5	2.5	15	115	1.55	1-4-64	8330	8554	224	5	5	5
		124A	0	0.5	1.0	25	115	1.55	1-4-64	16630	17078	448	5	4	4
		125A	0	0.5	2.5	25	115	1.55	1-4-64	8402	8626	224	5	5	5
		85A	40	0.5	1.0	15	160	1.45	1-9-64	FAILED	9,710		5	11-8-65	
		86A	40	0.5	2.5	15	160	1.45	1-9-64	8296	8520	224	5	5	5
		99A	40	0.5	1.0	25	160	1.45	1-9-64	FAILED	4,853		5	2-11-65	
		100A	40	0.5	2.5	25	160	1.45	1-9-64	FAILED	4,424		5	9-30-65	
GOULD NICD	20	84A	0	0.5	1.0	15	115	1.55	1-16-64	16923	17371	448	5		
		98A	0	0.5	1.0	25	115	1.55	1-16-64	FAILED	10,641		5	1-14-66	
Pages		104A	25	0.5	1.0	25	125	1.49	1-16-64	FAILED	2,980		5	8-20-64	
		105A	25	0.5	2.5	25	125	1.49	1-16-64	FAILED	5,690		5	3-17-66	
108-110		112A	40	0.5	1.0	15	160	1.45	1-16-64	FAILED	5,213		5	2-15-65	
		118A	25	0.5	1.0	40	125	1.49	1-16-64	FAILED	2,937		5	9-7-64	
		119A	25	0.5	2.5	40	125	1.49	1-16-64	FAILED	1,794		5	9-27-64	
		126A	40	0.5	1.0	25	160	1.45	1-16-64	FAILED	1,569		5	5-23-64	
		80A	0	0.5	2.5	15	115	1.55	1-21-64	8436	8659	223	5	5	5
		94A	0	0.5	2.5	25	115	1.55	1-24-64	8320	8544	224	5	5	5
		108A	40	0.5	2.5	15	160	1.45	1-24-64	FAILED	4,233		5	8-31-65	
		122A	40	0.5	2.5	25	160	1.45	1-24-64	FAILED	983		5	7-2-64	

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON NICD	20	73A	25	0.5	1.0	25	125	1.49	1-16-64	FAILED	7,763		5	7-1-65	
		101A	0	0.5	1.0	15	115	1.55	1-16-64	FAILED	3,631		5	9-20-64	
		115A	0	0.5	1.0	25	115	1.55	1-16-64	FAILED	2,291		5	6-24-64	
		76A	40	0.5	1.0	15	160	1.45	1-18-64	FAILED	9,348		5	10-15-64	
		90A	40	0.5	1.0	25	160	1.45	1-18-64	FAILED	4,045		5	11-12-64	
		74A	25	0.5	2.5	25	125	1.49	1-21-64	FAILED	1,755		5	9-27-64	
		77A	40	0.5	2.5	15	160	1.45	1-21-64	FAILED	6,032		5	4-20-66	
		91A	40	0.5	2.5	25	160	1.45	1-21-64	FAILED	4,486		5	10-14-65	
		102A	0	0.5	2.5	15	115	1.55	1-27-64	8271	8495	224	5	4	4
		116A	0	0.5	2.5	25	115	1.55	1-27-64	8091	8315	224	5	5	4
		87A	25	0.5	1.0	40	125	1.49	2-1-64	FAILED	627		5	4-7-64	
		88A	25	0.5	2.5	40	125	1.49	2-1-64	FAILED	359		5	3-21-64	
YARDNEY AGCD	12.0	57A	0	1.0	23.0	50	*	1.50	2-14-64	FAILED	166		10	9-3-64	
		33A	40	1.0	23.0	50	*	1.50	2-14-64	FAILED	210		10	9-20-64	
G.E. NICD	12.0	93A	25**	1.0	23.0	50	200***	1.49**	3-28-64	FAILED	349		5	4-28-65	
GULTON NICD	6.0	79A	25	1.0	23.0	50	200	1.49	3-28-64	FAILED	545		5	10-13-65	
GULTON NICD	50.0	95A	0	0.5	1.0	25	115	1.55	6-8-64	FAILED	3,227		5	2-9-65	
		123A	40	0.5	1.0	15	160	1.45	6-8-64	FAILED	1,874		5	11-11-64	
GULTON (Commercial) NICD	4.0	115B	0	0.5	1.0	15	115	1.55	7-25-64	13691	14139	448	5	5	5
		126B	0	0.5	1.0	25	115	1.55	7-25-64	14173	14573	400	5	5	5
		4B	25	0.5	1.0	25	125	1.49	8-4-64	13969	14417	448	5	5	5
		14B	25	0.5	1.0	40	125	1.49	8-4-64	FAILED	8,474		5	3-19-66	
		28B	40	0.5	1.0	15	160	1.45	8-4-64	13618	14049	431	5	5	5
		40B	40	0.5	1.0	25	160	1.45	8-4-64	FAILED	10,359		5	6-22-66	
DELCO AGZN NAOH	25.0	75A	25	1.0	23.0	40	*	1.97	8-18-64	FAILED	32		5	9-18-64	
		89A	25	1.0	23.0	40	*	1.97	9-18-64	FAILED	80		5	12-8-64	
		88B	25	0.5	2.5	40	*	1.97	3-1-65	DISCONTINUED		120	5	3-16-65	
		88C	25	0.5	2.5	40	*	1.97	3-26-65	FAILED	325		5	5-6-65	
		9D	25	1.0	23.0	40	*	1.97	12-13-65	FAILED	119		10	4-18-66	
SONOTONE (Coulometer) NICD	5.0	--	25	0.5	1.0	30	*	1.60	8-25-64	12800	13020	220	5	5	4
DELCO AGZN	40	75B	25	1.0	23.0	25	*	1.97	10-28-64	DISCONTINUED		139	5	4-5-66	

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* Does not apply.

** Changed to 40° C, 1.45 v/cell limit after cycle 173.

*** Increased to 250% after cycle 266.

(1) Actual percent of recharge may be lower due to voltage limit.

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON NICD	12.0	90B	40	0.5	1.0	25	160	1.45	12-2-64	FAILED	5,124		5	11-10-65	
		96B	25	0.5	1.0	40	125	1.49	12-2-64	FAILED	5,152		5	11-9-65	
		101B	0	0.5	1.0	25	115	1.55	12-19-64	11741	12189	448	5	4	4
Pages		78A	40	0.5	1.0	15	160	1.45	12-22-64	FAILED	11,081		5	1-4-66	
		27B	25	0.5	1.0	25	125	1.49	1-28-65	10875	11309	434	5	4	4
118-120		16B	0	0.5	1.0	15	115	1.55	2-20-65	10904	11352	448	5	5	5
GULTON (Third Electrode) NICD	6.0	11A	25	0.5	1.0	40	*	*	2-5-65	FAILED	7,743		5	7-9-66	
		23A	25	0.5	1.0	25	*	*	2-5-65	10314	10762	448	5	5	4
		59A	0	0.5	1.0	25	*	*	4-15-65	8772	9220	448	5	4	4
		71A	0	0.5	1.0	40	*	*	4-15-65	FAILED	5,753		5	5-18-66	
Pages		47A	40	0.5	1.0	25	*	*	5-16-65	FAILED	5,521		5	5-11-66	
121-123		35A	40	0.5	1.0	15	*	*	6-28-65	8334	8733	399	5	5	5
GULTON HSI NICD	6.0	13B	0	0.5	1.0	25	115	1.55	2-22-65	10850	11298	448	5	5	5
Page 124		18B	25	0.5	1.0	40	125	1.49	2-22-65	FAILED	7,577		5	7-20-66	
		38B	40	0.5	1.0	25	160	1.45	2-22-65	FAILED	5,766		5	3-31-66	
G.E. (Nimbus) NICD	5.0	103A	0	0.5	1.0	15	110	1.49	4-24-65	9878	10326	448	5	5	5
		106A	25	0.5	1.0	15	120	1.49	4-24-65	9905	10353	448	5	5	5
		113A	40	0.5	1.0	15	130	1.49	4-24-65	FAILED	4,998		5	3-15-66	
Pages		107A	0	0.5	1.0	25	110	1.49	6-5-65	9227	9675	448	5	5	5
125-128		104B	25	0.5	1.0	25	120	1.49	6-10-65	9192	9640	448	5	4	4
		114A	40	0.5	1.0	25	130	1.49	6-12-65	FAILED	8,273		5	12-19-66	
GULTON (Nimbus) NICD	5.0	127A	40	0.5	1.0	15	130	1.49	4-29-65				5		
		120A	25	0.5	1.0	15	120	1.49	5-2-65	9817	10265	448	5	4	4
		117A	0	0.5	1.0	15	110	1.49	5-8-65	9476	9924	448	5	5	5
Pages		121A	0	0.5	1.0	25	110	1.49	6-5-65	9122	9570	448	5	4	4
129-131		118B	25	0.5	1.0	25	120	1.49	6-10-65	FAILED	8,108		5	11-22-66	
		128B	40	0.5	1.0	25	130	1.49	6-12-65	FAILED	6,344		5	8-17-66	
YARDNEY AGZN Limited Electrolyte	12.0	9A	25	1.0	23.0	42	*	1.97	5-7-65	FAILED	57		10	7-6-65	

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MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
SONOTONE (Triode Seal) NICD Pages 132-134	3.0	31B	0	0.5	1.0	25	115	1.55	6-24-65	8152	8551	399	5	4	4
		43B	0	0.5	1.0	15	115	1.55	6-24-65	8473	8872	399	5	5	5
		3B	25	0.5	1.0	25	125	1.49	6-25-65	8906	9306	400	5	5	5
		2B	25	0.5	1.0	40	125	1.49	7-10-65	FAILED	5,399		5	7-26-66	
		26B	40	0.5	1.0	15	160	1.45	7-10-65	FAILED	6,289		5	10-4-66	
		37B	40	0.5	1.0	25	160	1.45	7-10-65	FAILED	5,625		5	8-4-66	
G.E. (Third Electrode) NICD Pages	12.0	12A	25	0.5	1.0	25	*	*	7-20-65	DISCONTINUED		1698	5	12-1-65	
		24A	25	0.5	1.0	40	*	*	10-2-65	DISCONTINUED		665	5	11-19-65	
		60A	0	0.5	1.0	25	*	*	10-6-65	DISCONTINUED		5650	5	2-10-67	
		48A	40/0	0.5	1.0	25/40	*	*	10-12-65	DISCONTINUED		5110	5	2-10-67	
GULTON (Sherfey) NICD	3.6	-	25	0.5	1.0	40	60	*	9-5-65	FAILED	5,505		10	8-16-66	
SONOTONE (Stabistor) NICD Page 135	5.0	73B	25	0.5	1.0	25	*	*	8-12-65	FAILED	3,742		5	4-15-66	
		87B	25	0.5	1.0	40	*	*	8-12-65	FAILED	2,392		5	1-27-66	
		99B	40	0.5	1.0	25	*	*	8-23-65	FAILED	4,339		5	7-9-66	
		112B	40	0.5	1.0	40	*	*	8-23-65	FAILED	3,262		5	4-4-66	
		92A	0	0.5	1.0	25	*	*	9-5-65	7320	7768	448	5	4	4
		122B	0	0.5	1.0	40	*	*	9-5-65	FAILED	5,190		5	4-1-66	
		75C	-20	0.5	1.0	25	*	*	10-24-65	FAILED	2,145		5	4-5-66	
		89B	-20	0.5	1.0	40	*	*	10-24-65	FAILED	1,530		5	2-26-66	
YARDNEY AGCD Pages 136-137	5.0	21A	25	1.0	23.0	20	*	1.50	9-17-65	FAILED	98		5	12-25-65	
		45A	40	1.0	23.0	20	*	1.50	9-17-65	FAILED	61		5	11-16-65	
		57B	0	1.0	23.0	20	*	1.50	9-17-65	FAILED	266		5	6-17-66	
		9C	25	1.0	23.0	20	*	1.50	10-27-65	FAILED	34		5	12-1-65	
		33B	25	1.0	23.0	20	*	1.50	10-27-65	447	475	28	5	5	5
		69A	25	1.0	23.0	20	*	1.50	10-27-65	447	475	28	5	5	5
GULTON (Coulometer) NICD	3.6	39B	25	0.5	1.0	40	*	1.48	11-11-65	FAILED	5,399		10	12-6-66	
GULTON (Folded Seal) NICD Pages 138-140	5.6	42B	40	0.5	1.0	25	160	1.45	12-3-65	FAILED	3,798		5	9-27-66	
		76B	25	0.5	1.0	25	125	1.49	12-10-65	6307	6706	399	5	5	4
		100B	0	0.5	1.0	25	115	1.55	12-17-65	6174	6573	399	5	5	5
		44B	-20	0.5	1.0	25	115	1.55	1-2-66	6060	6459	399	5	5	5

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON (Nonfolded Seal) NICD Pages 141-143	5.6	30B	40	0.5	1.0	25	160	1.45	12-3-65	FAILED	1,275		5	3-8-66	
		96C	25	0.5	1.0	25	125	1.49	12-10-65	6217	6616	399	5	3	3
		90C	0	0.5	1.0	25	115	1.55	12-17-65	6283	6682	399	5	5	5
		32B	-20	0.5	1.0	25	115	1.55	1-2-66	6044	6443	399	5	5	5
YARDNEY AGCD Pages 144-145	12.0	82B	25	0.5	1.0	25	130	1.55	1-17-66	FAILED	4,559		5	11-27-66	
		85B	-20/40	0.5	1.0	25	130	1.60	1-19-66	1907	2355	448	5	5	4
		97B	0	0.5	1.0	25	130	1.58	1-19-66	3834	4282	448	5	3	3
GULTON NICD Pages 146-149	1.25	74B	-20	0.5	1.0	25	*	*	3-3-66	4767	5215	448	5	5	5
		88D	-20	0.5	1.0	60/25	*	*	3-3-66	4156	4604	448	5	4	4
		98B	0	0.5	1.0	60	*	*	3-4-66	5075	5523	448	5	4	4
		108B	0	0.5	1.0	25	*	*	3-4-66	5058	5506	448	5	5	5
G.E. (with Gulton Coulometer) NICD	6.0	38C	40	0.5	1.0	40	*	1.41	5-7-66	FAILED	4,059		11	9-27-66	
ESB (Third Electrode) AGCD Page 150	8.0	1B	25	1.0	7.0	25	175	1.54	9-9-66	416	500	84	5	5	5
YARDNEY (FR #1) AGCD Page 151	3.0	2C	25	0.5	1.0	16	260	1.55	9-16-66	2046	2493	447	9	9	9
DELCO AGZN Page ?	25	9E	25	1.0	23.0	40	*	1.97	10-5-66	DISCONTINUED		28	10	1-4-67	
GULTON (Third Electrode) NICD Page 152	12.0	11B	25	0.5	1.0	25	*	*	10-17-66	1488	1936	448	5	5	5
YARDNEY AGCD Pages 153	11.0	21B	25	1.0	23.0	40	157	1.51	11-5-66	FAILED	69		10	1-13-67	
		45B	0	1.0	23.0	40	157	1.51	11-5-66	87	115	28	10	10	10

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON	6.0	18C	25	0.5	2.5	25	*	*	11-18-66	573	797	224	5	5	5
(Coulometer)		29B	40	0.5	2.5	25	*	*	11-18-66	547	771	224	5	5	5
NICD		41B	-20	0.5	2.5	25	*	*	11-18-66	551	766	215	5	5	5
Pages 154-157		66B	0	0.5	2.5	25	*	*	11-18-66	573	797	224	5	5	5
YARDNEY	16.0	57C	25	1.0	23.0	31	*	2.00	12-2-66	52	80	28	10	10	10
AGZN															
Page 158															
GULTON	3.5	73C	25	0.5	1.0	40	125	1.49	12-23-66	606	1054	448	5	5	5
(Plitt Seal)		87C	25	0.5	1.0	25	125	1.49	12-23-66	606	1054	448	5	5	5
NICD		75D	-20	0.5	1.0	40	110	1.56	12-24-66	579	1027	448	5	5	5
		89C	-20	0.5	1.0	25	110	1.56	12-24-66	580	1050	480	5	5	5
Pages		99C	0	0.5	1.0	40	115	1.55	12-24-66	587	1035	448	5	5	5
159-165		122C	0	0.5	1.0	25	115	1.55	12-24-66	588	1036	448	5	5	5
		112C	40	0.5	1.0	25	160	1.45	1-2-67	445	893	448	5	5	5
GULTON	12.0	47B	40	0.5	1.0	25	*	*	1-5-67	411	816	405	5	5	5
(Third		71B	0	0.5	1.0	40	*	*	1-6-67	400	789	389	5	5	5
Electrode)		70A	0	0.5	1.0	25	*	*	2-10-67				5		
NICD															
Pages 166-167															
YARDNEY	5.0	77B	25	1.0	23.0	20	*	1.50	1-12-67	17182	17630	448	5	5	5
AGCD		105B	25	1.0	23.0	20	*	1.50	1-12-67				5		
		113B	0	1.0	23.0	20	*	1.50	1-22-67				5		
Pages		114B	0	1.0	7.0	20	*	1.50	1-22-67				5		
170-168		118C	25	1.0	7.0	20	*	1.50	1-17-67				5		
		128B	40	1.0	23.0	20	*	1.50	1-22-67				5		
G.E.	12.0	24B	25	0.5	1.0	40	*	*	1-5-67	DISCONTINUED		484	5	2-10-67	
(Third		12B	25	0.5	1.0	25	*	*	1-6-67	DISCONTINUED		404	5	2-10-67	
Electrode)		58A	0	0.5	1.0	25	*	*	1-20-67	DISCONTINUED		136	5	2-10-67	
NICD		72A	25	0.5	1.0	25	*	*	1-20-67	DISCONTINUED		177	5	2-10-67	
Pages		34A	40	0.5	1.0	40	*	*	1-26-67	DISCONTINUED		28	5	2-10-67	
176-171		36A	40	0.5	1.0	25	*	*	1-27-67	DISCONTINUED		75	5	2-10-67	

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS) DISCH.	ORBIT PERIOD (HRS) CHG.	PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	DATE STARTED	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFF	CELLS IN PACK INITIAL	CELLS IN PACK THIS MONTH START	CELLS IN PACK THIS MONTH END
GULTON (Coulometer) NICD	4.0	14C	25	0.5	1.0	25	*	1.44	3-3-67				5		
		26C	25	0.5	1.0	15	*	1.44	2-18-67				5		
		37C	25	0.5	1.0	40	*	1.44	3-4-67				5		
		38D	25	0.5	1.0	60	*	1.44	2-18-67				5		
Pages 177-178		39C	40	0.5	1.0	25	*	1.38	3-3-67				5		
		40C	-20	0.5	1.0	25	*	1.56	3-4-67				5		
		52B	0	0.5	1.0	25	*	1.48	3-3-67				5		

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PACK NO. 64A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
G.E. 3 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
17574.	11.99	1.51	1.21	1.21	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.18	
17606.	12.01	1.50	1.21	1.20	1.20	1.20	1.21	1.20	1.20	1.20	1.20	1.18	
17638.	12.00	1.51	1.21	1.21	1.20	1.20	1.21	1.20	1.20	1.20	1.20	1.18	
17671.	12.01	1.51	1.21	1.21	1.20	1.20	1.21	1.20	1.20	1.20	1.21	1.19	
17699.	11.99	1.51	1.21	1.21	1.20	1.20	1.21	1.20	1.20	1.20	1.20	1.19	
17731.	11.98	1.53	1.21	1.21	1.20	1.20	1.21	1.19	1.20	1.20	1.20	1.19	
17764.	12.02	1.52	1.21	1.22	1.21	1.21	1.21	1.20	1.21	1.20	1.21	1.19	
17827.	12.03	1.52	1.21	1.22	1.21	1.21	1.21	1.20	1.20	1.21	1.21	1.19	
17923.	12.04	1.51	1.20	1.21	1.20	1.20	1.20	1.19	1.20	1.20	1.20	1.19	
17955.	12.03	1.51	1.21	1.21	1.20	1.20	1.20	1.19	1.20	1.20	1.20	1.19	
17987.	12.00	1.52	1.21	1.22	1.21	1.21	1.21	1.19	1.20	1.20	1.21	1.18	
		0.86											END OF CHARGE
17574.	15.59	0.48	1.52	1.54	1.58	1.64	1.53	1.59	1.55	1.55	1.53	1.53	
17606.	15.61	0.49	1.52	1.53	1.57	1.65	1.53	1.59	1.56	1.55	1.53	1.53	
17638.	15.59	0.47	1.51	1.53	1.59	1.64	1.53	1.59	1.55	1.56	1.52	1.53	
17671.	15.62	0.47	1.52	1.54	1.59	1.65	1.53	1.59	1.55	1.55	1.53	1.54	
17699.	15.61	0.48	1.52	1.54	1.58	1.65	1.53	1.60	1.56	1.56	1.52	1.54	
17731.	15.68	0.51	1.53	1.54	1.59	1.67	1.53	1.60	1.57	1.55	1.53	1.54	
17764.	15.70	0.53	1.53	1.54	1.60	1.68	1.53	1.61	1.57	1.55	1.52	1.54	
17827.	15.67	0.58	1.52	1.54	1.58	1.69	1.53	1.62	1.57	1.55	1.54	1.53	
17923.	15.78	0.55	1.51	1.53	1.57	1.67	1.50	1.60	1.56	1.54	1.51	1.55	
17955.	15.69	0.56	1.52	1.55	1.60	1.69	1.52	1.62	1.57	1.54	1.54	1.53	
17987.	15.71	0.55	1.53	1.54	1.58	1.70	1.52	1.61	1.57	1.56	1.54	1.53	

PACK NO. 63A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
G.E. 3 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
17317.	11.05	0.90	1.24	1.25	1.23	1.17	1.23	0.0	1.23	1.23	1.24	1.22	
17349.	11.04	0.90	1.23	1.25	1.23	1.17	1.23	0.0	1.23	1.24	1.25	1.22	
17382.	11.07	0.90	1.24	1.25	1.24	1.17	1.24	0.0	1.23	1.24	1.25	1.23	
17413.	11.03	0.90	1.23	1.25	1.24	1.16	1.23	0.0	1.23	1.23	1.24	1.23	
17445.	11.02	0.90	1.23	1.25	1.24	1.16	1.24	0.0	1.23	1.23	1.24	1.23	
17477.	11.03	0.90	1.23	1.25	1.23	1.17	1.23	0.0	1.23	1.23	1.24	1.23	
17588.	11.06	0.90	1.23	1.25	1.23	1.16	1.23	0.0	1.23	1.23	1.24	1.23	
17652.	11.31	0.90	1.27	1.28	1.28	1.20	1.27	0.0	1.25	1.27	1.27	1.25	
		0.52											END OF CHARGE
17317.	13.88	0.24	1.60	1.48	1.54	1.54	1.64	0.0	1.52	1.50	1.51	1.52	
17349.	13.87	0.23	1.60	1.48	1.55	1.54	1.64	0.0	1.52	1.49	1.51	1.52	
17382.	13.89	0.22	1.61	1.48	1.54	1.54	1.65	0.0	1.52	1.50	1.51	1.52	
17413.	13.87	0.23	1.61	1.48	1.55	1.54	1.64	0.0	1.52	1.50	1.51	1.52	
17445.	13.86	0.25	1.61	1.49	1.54	1.54	1.60	0.0	1.52	1.50	1.50	1.51	
17477.	13.87	0.24	1.61	1.48	1.55	1.54	1.64	0.0	1.52	1.50	1.51	1.51	
17588.	14.00	0.23	1.59	1.48	1.55	1.52	1.62	0.0	1.51	1.48	1.49	1.54	
17652.	14.04	0.20	1.58	1.53	1.55	1.61	1.64	0.0	1.55	1.51	1.55	1.51	

PACK NO. 67A
G.E. 3 A.H.

DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
PERCENT OF RECHARGE 115 ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8636.	12.43	0.89	1.25	1.26	1.22	1.25	1.24	1.24	1.25	1.24	1.24	1.23	
8668.	12.36	0.90	1.24	1.25	1.22	1.24	1.24	1.24	1.24	1.23	1.24	1.23	
8700.	12.37	0.90	1.24	1.26	1.22	1.25	1.24	1.24	1.24	1.23	1.24	1.24	
8732.	12.34	0.91	1.24	1.25	1.22	1.24	1.24	1.24	1.24	1.23	1.24	1.23	
8764.	12.39	0.91	1.24	1.26	1.23	1.25	1.25	1.24	1.24	1.23	1.24	1.23	
8827.	12.38	0.90	1.24	1.26	1.23	1.25	1.25	1.24	1.24	1.23	1.24	1.23	
		0.21											END OF CHARGE
8636.	15.51	0.15	1.52	1.52	1.53	1.57	1.59	1.59	1.52	1.56	1.52	1.54	
8668.	15.47	0.12	1.52	1.52	1.51	1.55	1.60	1.57	1.53	1.55	1.56	1.54	
8700.	15.43	0.12	1.55	1.51	1.49	1.58	1.60	1.56	1.54	1.53	1.54	1.53	
8732.	15.03	0.10	1.49	1.50	1.46	1.52	1.54	1.52	1.50	1.50	1.49	1.50	
8764.	15.53	0.14	1.53	1.52	1.51	1.58	1.61	1.58	1.54	1.56	1.55	1.54	
8827.	15.60	0.13	1.54	1.52	1.50	1.59	1.62	1.58	1.57	1.56	1.58	1.54	

PACK NO. 68A
G.E. 3 A.H.

DEPTH OF DISCHARGE 25.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8821.	10.80	1.51	1.20	1.20	1.21	1.21	1.19	1.21	1.21	1.20	0.0	1.20	
8853.	10.78	1.51	1.19	1.20	1.20	1.21	1.20	1.20	1.21	1.20	0.0	1.20	
8885.	10.75	1.52	1.19	1.20	1.20	1.21	1.20	1.20	1.21	1.20	0.0	1.20	
8917.	10.76	1.52	1.19	1.20	1.20	1.21	1.20	1.20	1.21	1.20	0.0	1.20	
8981.	10.75	1.51	1.19	1.20	1.20	1.21	1.20	1.20	1.21	1.20	0.0	1.20	
		0.34											END OF CHARGE
8821.	13.68	0.07	1.54	1.61	1.46	1.53	1.52	1.55	1.50	1.49	0.0	1.45	
8853.	13.65	0.08	1.53	1.62	1.46	1.52	1.51	1.55	1.50	1.51	0.0	1.45	
8885.	13.78	0.09	1.58	1.63	1.46	1.53	1.53	1.57	1.52	1.52	0.0	1.47	
8917.	13.88	0.10	1.61	1.64	1.46	1.53	1.55	1.58	1.53	1.52	0.0	1.48	
8981.	12.91	0.34	1.45	1.44	1.43	1.43	1.44	1.43	1.44	1.41	0.01	1.45	

PACK NO. 51A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
GOULD 3.5 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE										END OF DISCHARGE
		1.05	1	2	3	4	5	6	7	8	9	10	
17476.	11.21	1.05	1.24	1.22	1.21	1.27	1.25	1.26	1.00	1.26	1.28	0.0	
17508.	11.17	1.06	1.24	1.22	1.20	1.28	1.24	1.25	1.23	1.26	1.28	0.0	
17541.	11.18	1.06	1.24	1.23	1.21	1.28	1.25	1.24	1.23	1.26	1.28	0.0	
17572.	11.16	1.05	1.24	1.22	1.21	1.29	1.25	1.24	1.23	1.25	1.27	0.0	
17604.	11.09	1.08	1.23	1.22	1.21	1.30	1.25	1.19	1.23	1.24	1.26	0.0	
17636.	11.16	1.07	1.23	1.22	1.21	1.30	1.25	1.24	1.23	1.24	1.27	0.0	
17747.	11.16	1.06	1.24	1.23	1.21	1.28	1.23	1.21	1.23	1.24	1.26	0.0	
17811.	11.17	1.06	1.25	1.24	1.22	1.27	1.25	1.25	1.24	1.24	1.26	0.0	
		0.60											END OF CHARGE
17476.	14.03	0.52	1.56	1.58	1.59	1.47	1.55	1.63	1.57	1.58	1.49	0.0	
17508.	13.94	0.50	1.55	1.58	1.59	1.48	1.53	1.61	1.57	1.55	1.50	0.0	
17541.	14.00	0.52	1.55	1.58	1.60	1.49	1.57	1.55	1.59	1.57	1.50	0.0	
17572.	13.91	0.57	1.56	1.59	1.60	1.51	1.56	1.45	1.59	1.56	1.52	0.0	
17604.	13.85	0.52	1.55	1.59	1.60	1.51	1.56	1.43	1.59	1.54	1.51	0.0	
17636.	13.93	0.53	1.56	1.59	1.60	1.52	1.55	1.51	1.58	1.53	1.52	0.0	
17747.	14.02	0.59	1.55	1.58	1.59	1.51	1.53	1.44	1.56	1.52	1.51	0.0	
17811.	13.95	0.41	1.53	1.56	1.59	1.44	1.59	1.57	1.65	1.53	1.52	0.0	

PACK NO. 55A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
GOULD 3.5 A.H. — PERCENT OF RECHARGE 115 3 — ORBIT PERIOD 0.1 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE										END OF DISCHARGE
		0.05	1	2	3	4	5	6	7	8	9	10	
8690.	12.56	1.05	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.26	1.25	
8722.	12.08	1.08	1.22	1.17	1.23	1.20	1.22	1.20	1.21	1.20	1.22	1.21	
8754.	12.64	1.08	1.27	1.27	1.27	1.26	1.26	1.26	1.26	1.26	1.27	1.27	
8781.	10.11	1.08	1.19	0.09	1.19	1.16	1.18	1.16	1.17	0.84	1.18	1.15	
8799.	12.65	1.06	1.26	1.28	1.28	1.26	1.26	1.26	1.26	1.27	1.27	1.27	
		0.24											END OF CHARGE
8690.	15.09	0.20	1.52	1.48	1.51	1.53	1.52	1.50	1.50	1.49	1.52	1.49	
8722.	13.80	0.07	1.39	1.37	1.39	1.38	1.39	1.38	1.38	1.36	1.38	1.36	
8754.	14.59	0.24	1.47	1.45	1.48	1.46	1.46	1.45	1.46	1.44	1.47	1.44	
8781.	14.04	0.25	1.41	1.41	1.41	1.42	1.42	1.40	1.40	1.39	1.40	1.39	
8799.	15.85	0.23	1.58	1.64	1.62	1.57	1.58	1.53	1.54	1.61	1.59	1.59	

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PACK NO. 56A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
GOULD 3.5 A.H. — PERCENT OF RECHARGE 115 3 — ORBIT PERIOD 0.1 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.06	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8960.	12.24	1.74	1.21	1.23	1.24	1.23	1.22	1.21	1.23	1.23	1.21	1.21	
8992.	12.12	1.75	1.20	1.22	1.23	1.22	1.21	1.20	1.22	1.22	1.21	1.21	
9024.	12.08	1.75	1.20	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.21	
9056.	12.05	1.76	1.20	1.22	1.22	1.21	1.21	1.19	1.21	1.21	1.20	1.20	
9088.	12.09	1.76	1.21	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.21	
9120.	12.08	1.75	1.21	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.21	1.20	
9152.	12.07	1.75	1.21	1.22	1.22	1.22	1.21	1.20	1.20	1.21	1.20	1.20	
		0.40											END OF CHARGE
8960.	15.88	0.24	1.55	1.56	1.59	1.65	1.59	1.57	1.64	1.55	1.56	1.58	
8992.	15.64	0.24	1.55	1.56	1.55	1.59	1.58	1.56	1.57	1.53	1.56	1.56	
9024.	15.61	0.27	1.56	1.56	1.54	1.61	1.57	1.56	1.55	1.53	1.56	1.57	
9056.	15.60	0.30	1.56	1.56	1.53	1.60	1.57	1.57	1.54	1.53	1.56	1.57	
9088.	15.63	0.31	1.56	1.58	1.54	1.60	1.58	1.57	1.53	1.53	1.56	1.57	
9120.	15.60	0.30	1.56	1.58	1.52	1.60	1.57	1.57	1.52	1.53	1.57	1.57	
9152.	15.60	0.31	1.57	1.58	1.52	1.60	1.57	1.57	1.52	1.53	1.57	1.57	

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IJT223I

PACK NO. 50A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
SONOTONE 5 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
16649.	7.96	2.51	0.95	1.17	0.0	0.0	0.0	1.16	1.18	1.17	1.17	1.16	
16681.	7.98	2.51	0.96	1.17	0.0	0.0	0.0	1.16	1.18	1.17	1.18	1.16	
16713.	7.95	2.52	0.94	1.17	0.0	0.0	0.0	1.16	1.17	1.17	1.17	1.16	
16745.	7.92	2.51	0.93	1.17	0.0	0.0	0.0	1.16	1.17	1.17	1.17	1.16	
16777.	7.94	2.51	0.94	1.18	0.0	0.0	0.0	1.16	1.18	1.17	1.17	1.16	
16810.	7.94	2.51	0.93	1.17	0.0	0.0	0.0	1.16	1.18	1.17	1.17	1.16	
16899.	7.91	2.52	0.92	1.18	0.0	0.0	0.0	1.16	1.17	1.17	1.17	1.16	
16969.	7.89	2.52	0.90	1.17	0.0	0.0	0.0	1.16	1.17	1.16	1.17	1.16	
17033.	7.89	2.52	0.89	1.18	0.0	0.0	0.0	1.16	1.17	1.17	1.17	1.15	
		1.44											END OF CHARGE
16649.	10.72	0.64	1.53	1.47	0.0	0.0	0.0	1.52	1.47	1.54	1.48	1.64	
16681.	10.70	0.64	1.53	1.47	0.0	0.0	0.0	1.52	1.47	1.54	1.48	1.64	
16713.	10.71	0.63	1.53	1.47	0.0	0.0	0.0	1.52	1.47	1.54	1.00	1.65	
16745.	10.71	0.63	1.53	1.47	0.0	0.0	0.0	1.52	1.47	1.54	1.48	1.65	
16777.	10.68	0.65	1.52	1.47	0.0	0.0	0.0	1.52	1.47	1.53	1.47	1.64	
16810.	10.71	0.65	1.53	1.00	0.0	0.0	0.0	1.52	1.47	1.54	1.48	1.65	
16899.	10.71	0.64	1.53	1.48	0.0	0.0	0.0	1.52	1.48	1.53	1.48	1.65	
16969.	10.79	0.66	1.52	1.46	0.0	0.0	0.0	1.51	1.46	1.52	1.46	1.67	
17033.	10.72	0.65	1.53	1.48	0.0	0.0	0.0	1.52	1.47	1.54	1.49	1.64	

PACK NO. 5A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 25. C
SONOTONE 5 A.H. — PERCENT OF RECHARGE 125 — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE										END OF DISCHARGE
		2.50	1	2	3	4	5	6	7	8	9	10	
8403.	9.34	2.48	1.13	0.0	0.0	1.18	1.17	1.17	1.18	1.17	1.17	1.17	
8435.	9.30	2.44	1.10	0.0	0.0	1.18	1.17	1.17	1.18	1.17	1.17	1.17	
8467.	9.28	2.48	1.08	0.0	0.0	1.18	1.17	1.18	1.18	1.17	1.16	1.17	
8499.	9.23	2.49	1.06	0.0	0.0	1.18	1.17	1.17	1.17	1.16	1.16	1.17	
8563.	9.25	2.47	1.06	0.0	0.0	1.18	1.17	1.17	1.18	1.16	1.16	1.17	
		0.62											END OF CHARGE
8403.	11.99	0.47	1.45	0.0	0.0	1.49	1.49	1.62	1.48	1.46	1.50	1.46	
8435.	11.98	0.45	1.44	0.0	0.0	1.49	1.49	1.62	1.47	1.46	1.50	1.47	
8467.	11.98	0.46	1.44	0.0	0.0	1.49	1.49	1.62	1.48	1.46	1.50	1.47	
8499.	12.00	0.46	1.43	0.0	0.0	1.50	1.50	1.62	1.48	1.46	1.50	1.47	
8563.	11.87	0.61	1.43	0.02	0.01	1.49	1.50	1.49	1.48	1.46	1.49	1.48	

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PACK NO. 49A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C

SONE 5 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CELL NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
17239.	9.69	1.51	1.21	1.19	0.0	1.20	1.20	1.22	1.23	1.23	0.0	1.22	
17273.	9.69	1.51	1.21	1.19	0.0	1.20	1.20	1.22	1.23	1.23	0.0	1.22	
17303.	9.63	1.52	1.20	1.17	0.0	1.19	1.20	1.21	1.23	1.22	0.0	1.21	
17334.	9.65	1.52	1.20	1.17	0.0	1.20	1.20	1.22	1.23	1.23	0.0	1.22	
17367.	9.67	1.51	1.20	1.18	0.0	1.20	1.21	1.22	1.23	1.23	0.0	1.22	
17399.	9.71	1.52	1.21	1.20	0.0	1.20	1.21	1.22	1.24	1.23	0.0	1.22	
17497.	9.73	1.52	1.21	1.22	0.0	1.20	1.21	1.23	1.24	1.23	0.0	1.22	
17526.	9.72	1.52	1.21	1.21	0.0	1.21	1.21	1.22	1.24	1.23	0.0	1.22	
17560.	9.69	1.50	1.20	1.19	0.0	1.20	1.20	1.22	1.23	1.22	0.0	1.22	
17624.	9.70	1.49	1.21	1.20	0.0	1.21	1.21	1.22	1.23	1.23	0.0	1.22	
		0.86											END OF CHARGE
17239.	12.44	0.53	1.55	1.46	0.0	1.54	1.54	1.64	1.57	1.56	0.0	1.55	
17273.	12.43	0.55	1.54	1.46	0.0	1.54	1.54	1.63	1.57	1.56	0.0	1.55	
17303.	12.47	0.50	1.55	1.45	0.0	1.55	1.54	1.66	1.58	1.57	0.0	1.56	
17334.	12.45	0.54	1.54	1.46	0.0	1.55	1.55	1.65	1.57	1.56	0.0	1.55	
17367.	12.42	0.53	1.54	1.46	0.0	1.54	1.54	1.64	1.57	1.56	0.0	1.55	
17399.	12.56	0.62	1.55	1.48	0.0	1.55	1.56	1.68	1.58	1.58	0.0	1.56	
17497.	12.58	0.65	1.55	1.50	0.0	1.56	1.56	1.67	1.59	1.58	0.0	1.56	
17526.	12.57	0.65	1.56	1.49	0.0	1.56	1.57	1.67	1.59	1.58	0.0	1.56	
17560.	12.55	0.64	1.56	1.46	0.0	1.55	1.53	1.60	1.55	1.54	0.0	1.59	
17624.	12.47	0.55	1.40	1.40	0.0	1.55	1.55	1.62	1.58	1.58	0.0	1.55	

PACK NO. 53A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
SONOTONE 5 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8532.	12.21	1.51	1.20	1.21	1.22	1.23	1.23	1.22	1.23	1.21	1.23	1.22	
8564.	12.21	1.51	1.20	1.21	1.23	1.23	1.24	1.22	1.23	1.22	1.22	1.21	
8596.	12.20	1.50	1.19	1.22	1.23	1.23	1.23	1.23	1.23	1.22	1.22	1.22	
8628.	12.21	1.50	1.20	1.22	1.23	1.24	1.24	1.23	1.23	1.22	1.22	1.23	
8692.	12.20	1.50	1.20	1.22	1.23	1.23	1.24	1.22	1.23	1.21	1.22	1.22	
		0.35											END OF CHARGE
8532.	15.55	0.19	1.49	1.50	1.54	1.61	1.53	1.49	1.57	1.57	1.57	1.64	
8564.	15.55	0.18	1.48	1.00	1.54	1.62	1.56	1.49	1.58	1.62	1.52	1.62	
8596.	15.52	0.19	1.49	1.50	1.54	1.61	1.55	1.50	1.56	1.61	1.52	1.62	
8628.	15.54	0.19	1.49	1.50	1.55	1.62	1.55	1.50	1.57	1.61	1.52	1.63	
8692.	15.35	0.31	1.59	1.65	1.58	1.50	1.52	1.50	1.54	1.54	1.44	1.48	

PACK NO. 54A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
SONOTONE 5 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8489.	11.44	2.52	1.18	1.15	0.84	1.14	1.20	1.19	1.18	1.19	1.19	1.19	
8521.	11.39	2.53	1.17	1.15	0.83	1.14	1.20	1.18	1.17	1.18	1.19	1.19	
8553.	11.45	2.52	1.18	1.16	0.84	1.15	1.20	1.19	1.18	1.19	1.20	1.19	
8585.	11.43	2.53	1.18	1.16	0.84	1.15	1.20	1.19	1.18	1.18	1.19	1.19	
8617.	11.50	2.53	1.18	1.17	0.86	1.15	1.21	1.19	1.18	1.19	1.20	1.19	
8649.	11.45	2.53	1.18	1.16	0.84	1.15	1.20	1.19	1.18	1.19	1.20	1.19	
8681.	11.45	2.53	1.18	1.16	0.84	1.15	1.20	1.19	1.18	1.19	1.20	1.19	
		0.58											END OF CHARGE
8489.	15.59	0.37	1.52	1.51	1.61	1.51	1.53	1.55	1.63	1.64	1.53	1.51	
8521.	15.65	0.39	1.52	1.51	1.62	1.52	1.55	1.55	1.66	1.65	1.53	1.52	
8553.	15.61	0.42	1.52	1.52	1.63	1.52	1.55	1.56	1.62	1.61	1.53	1.53	
8585.	15.55	0.45	1.52	1.52	1.63	1.53	1.55	1.55	1.59	1.58	1.53	1.52	
8617.	15.66	0.44	1.53	1.53	1.64	1.53	1.55	1.56	1.64	1.62	1.53	1.53	
8649.	15.64	0.37	1.52	1.52	1.63	1.52	1.54	1.56	1.65	1.65	1.53	1.52	
8681.	15.65	0.41	1.51	1.52	1.00	1.52	1.55	1.56	1.65	1.64	1.53	1.52	

PACK NO. 62A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
GULTON 6 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE										END OF DISCHARGE
		3.00	1	2	3	4	5	6	7	8	9	10	
16923.	6.92	3.00	1.19	1.16	1.12	0.0	0.0	1.15	0.0	1.16	1.17	0.0	
16955.	6.94	3.00	1.10	1.17	1.12	0.0	0.0	1.15	0.0	1.16	1.18	0.0	
16987.	6.92	3.00	1.19	1.16	1.12	0.0	0.0	1.15	0.0	1.16	1.18	0.0	
17019.	6.89	3.00	1.18	1.16	1.11	0.0	0.0	1.15	0.0	1.16	1.17	0.0	
17051.	6.92	3.00	1.19	1.17	1.12	0.0	0.0	1.15	0.0	1.16	1.17	0.0	
17084.	6.91	2.99	1.19	1.16	1.12	0.0	0.0	1.15	0.0	1.16	1.17	0.0	
17173.	6.88	2.99	1.19	1.16	1.11	0.0	0.0	1.14	0.0	1.15	1.17	0.0	
17243.	6.89	3.00	1.18	1.16	1.11	0.0	0.0	1.14	0.0	1.15	1.16	0.0	
17307.	6.88	3.00	1.18	1.16	1.11	0.0	0.0	1.14	0.0	1.16	1.17	0.0	
		1.72											END OF CHARGE
16923.	9.35	0.63	1.55	1.66	1.55	0.0	0.0	1.56	0.0	1.55	1.48	0.0	
16955.	9.34	0.64	1.56	1.64	1.55	0.0	0.0	1.55	0.0	1.56	1.48	0.0	
16987.	9.34	0.65	1.56	1.63	1.56	0.0	0.0	1.56	0.0	1.56	1.00	0.0	
17019.	9.34	0.63	1.56	1.63	1.56	0.0	0.0	1.56	0.0	1.56	1.48	0.0	
17051.	9.33	0.65	1.56	1.63	1.56	0.0	0.0	1.56	0.0	1.56	1.48	0.0	
17084.	9.34	0.65	1.56	1.64	1.55	0.0	0.0	1.56	0.0	1.56	1.48	0.0	
17173.	9.36	0.69	1.56	1.66	1.56	0.0	0.0	1.56	0.0	1.55	1.48	0.0	
17243.	9.46	0.63	1.54	1.66	1.54	0.0	0.0	1.54	0.0	1.54	1.45	0.0	
17307.	9.37	0.63	1.56	1.68	1.56	0.0	0.0	1.56	0.0	1.56	1.48	0.0	

PACK NO. 65A
GULTON 6 A.H.
DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 115
TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.80	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
8343.	8.46	1.82	1.22	1.23	1.22	0.0	1.20	0.0	1.18	0.0	1.25	1.17	
8375.	8.44	1.83	1.22	1.23	1.22	0.0	1.20	0.0	1.19	0.0	1.24	1.16	
8407.	8.41	1.81	1.22	1.23	1.22	0.0	1.17	0.0	1.18	0.0	1.24	1.17	
8439.	8.51	1.82	1.22	1.23	1.22	0.0	1.26	0.0	1.18	0.0	1.24	1.17	
8503.	8.52	1.83	1.22	1.24	1.23	0.0	1.26	0.0	1.18	0.0	1.25	1.17	
		0.41											END OF CHARGE
8343.	10.87	0.28	1.61	1.52	1.56	0.0	1.38	0.0	1.67	0.0	1.52	1.59	
8375.	10.84	0.28	1.63	1.53	1.58	0.0	1.38	0.0	1.68	0.0	1.52	1.52	
8407.	10.85	0.25	1.61	1.52	1.54	0.0	1.36	0.0	1.67	0.0	1.50	1.64	
8439.	10.84	0.29	1.60	1.53	1.57	0.0	1.43	0.0	1.67	0.0	1.51	1.53	
8503.	10.50	0.40	1.50	1.50	1.51	0.01	1.47	0.01	1.51	0.0	1.51	1.51	

PACK NO. 110A
G.E. 12 A.H.

DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
17030.	6.05	3.61	1.21	1.20	1.23	1.22	1.20	
17062.	6.06	3.64	1.20	1.20	1.23	1.22	1.20	
17094.	6.08	3.65	1.21	1.21	1.24	1.22	1.21	
17126.	6.06	3.61	1.21	1.21	1.23	1.22	1.21	
17158.	6.05	3.64	1.21	1.21	1.23	1.22	1.21	
17191.	6.07	3.54	1.21	1.21	1.23	1.22	1.21	
17280.	6.05	3.57	1.20	1.21	1.23	1.22	1.21	
17350.	6.11	3.60	1.21	1.21	1.23	1.22	1.21	
17414.	6.06	3.60	1.20	1.20	1.23	1.22	1.19	
		2.07						END OF CHARGE
17030.	7.27	1.02	1.41	1.53	1.44	1.50	1.39	
17062.	7.28	1.06	1.41	1.53	1.44	1.50	1.40	
17094.	7.30	1.00	1.42	1.54	1.45	1.50	1.41	
17126.	7.30	1.04	1.42	1.54	1.45	1.50	1.41	
17158.	7.28	1.06	1.41	1.54	1.45	1.50	1.42	
17191.	7.27	0.99	1.41	1.53	1.44	1.50	1.40	
17280.	7.29	1.05	1.41	1.54	1.45	1.51	1.41	
17350.	7.43	1.03	1.40	1.52	1.43	1.48	1.38	
17414.	7.30	1.05	1.41	1.54	1.45	1.51	1.39	

PACK NO. 111A
G.E. 12 A.H.

DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8349.	6.18	3.76	1.24	1.23	1.23	1.24	1.23	
8381.	6.16	3.62	1.23	1.23	1.24	1.24	1.23	
8413.	6.18	3.75	1.24	1.24	1.24	1.24	1.24	
8445.	6.15	3.80	1.23	1.23	1.24	1.24	1.23	
8477.	6.18	3.76	1.24	1.24	1.24	1.24	1.24	
8509.	6.20	3.76	1.28	1.28	1.28	1.29	1.28	
8541.	6.19	3.60	1.24	1.24	1.25	1.25	1.24	
		0.83						END OF CHARGE
8349.	7.86	0.39	1.60	1.55	1.58	1.54	1.59	
8381.	7.88	0.35	1.60	1.58	1.58	1.54	1.60	
8413.	7.85	0.41	1.59	1.55	1.58	1.54	1.60	
8445.	7.87	0.38	1.60	1.56	1.58	1.54	1.60	
8477.	7.88	0.38	1.61	1.56	1.59	1.54	1.61	
8509.	7.88	0.38	1.61	1.57	1.59	1.54	1.60	
8541.	7.87	0.40	1.61	1.56	1.59	1.54	1.60	

PACK NO. 124A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
G.E. 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
16657.	4.00	6.07	1.23	1.23	0.0	1.24	1.18	
16689.	4.67	6.04	1.18	1.18	0.0	1.19	1.13	
16721.	4.68	6.03	1.18	1.18	0.0	1.17	1.14	
16753.	4.67	6.04	1.18	1.18	0.0	1.19	1.13	
16785.	4.67	6.05	1.18	1.18	0.0	1.18	1.13	
16818.	4.66	6.07	1.18	1.17	0.0	1.18	1.13	
16907.	4.67	5.97	1.18	1.17	0.0	1.18	1.13	
16977.	4.68	5.93	1.18	1.18	0.0	1.18	1.14	
17041.	4.69	5.95	1.19	1.19	0.0	1.19	1.15	
		3.45						END OF CHARGE
16657.	6.22	1.53	1.59	1.50	0.0	1.50	1.62	
16689.	6.22	1.54	1.59	1.50	0.0	1.51	1.62	
16721.	6.24	1.51	1.59	1.51	0.0	1.58	1.55	
16753.	6.24	1.51	1.59	1.50	0.0	1.51	1.63	
16785.	6.24	1.55	1.59	1.50	0.0	1.51	1.62	
16818.	6.22	1.50	1.59	1.50	0.0	1.51	1.62	
16907.	6.25	1.51	1.59	1.50	0.0	1.51	1.63	
16977.	6.25	1.53	1.57	1.49	0.0	1.48	1.66	
17041.	6.26	1.48	1.59	1.51	0.01	1.51	1.65	

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PACK NO. 125A
G.E. 12 A.H.

DEPTH OF DISCHARGE 25.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8421.	5.99	5.90	1.20	1.20	1.20	1.21	1.18	
8453.	5.94	5.90	1.19	1.20	1.20	1.21	1.18	
8485.	5.10	5.61	0.93	1.05	1.04	1.06	1.04	
8517.	5.96	6.01	1.19	1.20	1.19	1.20	1.18	
8549.	5.98	6.00	1.20	1.20	1.20	1.20	1.18	
8581.	5.99	5.94	1.20	1.20	1.20	1.21	1.18	
8613.	5.97	5.97	1.19	1.20	1.20	1.21	1.18	
		1.38						END OF CHARGE
8421.	7.78	0.29	1.00	1.59	1.60	1.51	1.46	
8453.	7.77	0.30	1.60	1.60	1.60	1.51	1.46	
8485.	7.70	1.56	1.56	1.54	1.54	1.54	1.51	
8517.	7.77	0.29	1.60	1.59	1.60	1.50	1.46	
8549.	7.78	0.30	1.60	1.60	1.60	1.51	1.46	
8581.	7.80	0.29	1.60	1.60	1.60	1.51	1.46	
8613.	7.78	0.30	1.60	1.59	1.60	1.51	1.46	

PACK NO. 86A
G.E. 12 A.H.

DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40. C
ORBIT PERIOD 90.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8315.	5.50	3.58	1.14	1.14	1.00	1.13	1.12	
8347.	5.30	3.56	1.13	1.02	0.94	1.12	1.11	
8379.	5.38	3.58	1.14	1.09	0.93	1.12	1.11	
8411.	5.33	3.61	1.13	1.07	0.91	1.11	1.11	
8443.	5.36	3.61	1.13	1.06	0.94	1.12	1.11	
8475.	5.41	3.56	1.13	1.07	0.98	1.12	1.11	
8507.	5.39	3.57	1.14	1.10	0.93	1.12	1.11	
		1.15						END OF CHARGE
8315.	7.17	1.16	1.43	1.42	1.42	1.45	1.44	
8347.	7.13	1.16	1.43	1.40	1.41	1.44	1.44	
8379.	7.15	1.17	1.43	1.42	1.41	1.45	1.44	
8411.	7.17	1.17	1.43	1.42	1.41	1.44	1.44	
8443.	7.16	1.17	1.43	1.42	1.41	1.44	1.44	
8475.	7.16	1.16	1.43	1.41	1.41	1.45	1.44	
8507.	7.15	1.16	1.43	1.42	1.41	1.44	1.44	

PACK NO. 84A DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
GOULD 20 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
16945.	5.78	5.94	1.22	1.22	1.22	1.24	0.0	
16979.	5.80	5.99	1.21	1.23	1.22	1.24	0.0	
17009.	5.71	5.99	1.20	1.23	1.20	1.23	0.0	
17040.	4.84	5.88	1.22	1.26	1.23	1.25	0.0	
		3.45						END OF CHARGE
16945.	7.76	2.78	1.59	1.54	1.61	1.57	0.0	
16979.	7.76	2.73	1.58	1.55	1.60	1.58	0.0	
17009.	7.82	2.42	1.60	1.59	1.64	1.57	0.0	
17040.	7.93	3.41	1.63	1.59	1.67	1.59	0.0	

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PACK NO. 80A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
GOULD 20 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8457.	6.00	5.95	1.25	1.20	1.16	1.24	1.22	
8489.	6.01	5.97	1.24	1.18	1.15	1.24	1.23	
8521.	6.04	5.95	1.25	1.19	1.16	1.25	1.23	
8553.	6.05	6.00	1.24	1.19	1.17	1.25	1.24	
8617.	6.04	6.00	1.24	1.19	1.17	1.24	1.24	
		1.38						END OF CHARGE
8457.	7.49	0.81	1.49	1.51	1.54	1.50	1.45	
8489.	7.50	0.73	1.47	1.50	1.57	1.51	1.46	
8521.	7.48	0.79	1.48	1.50	1.54	1.50	1.48	
8553.	7.48	0.81	1.48	1.50	1.54	1.50	1.48	
8617.	7.42	1.00	1.47	1.49	1.53	1.49	1.46	

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PACK NO. 94A
GOULD 20 A.H.

DEPTH OF DISCHARGE 25.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8342.	5.99	10.13	1.22	1.20	1.19	1.21	1.18	
8374.	5.97	10.07	1.22	1.20	1.18	1.20	1.18	
8406.	5.98	10.06	1.22	1.20	1.18	1.20	1.18	
8438.	5.97	10.11	1.22	1.20	1.18	1.20	1.18	
8502.	5.97	10.12	1.22	1.20	1.18	1.20	1.18	
		2.30						END OF CHARGE
8342.	7.89	1.53	1.54	1.54	1.59	1.64	1.56	
8374.	7.88	1.47	1.54	1.54	1.60	1.64	1.55	
8406.	7.87	1.51	1.54	1.54	1.59	1.63	1.56	
8438.	7.86	1.56	1.54	1.54	1.59	1.63	1.55	
8502.	7.79	1.83	1.52	1.52	1.61	1.61	1.51	

PACK NO. 102A
GOULD 20 A.H.

DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8293.	4.79	6.07	1.18	0.0	1.18	1.24	1.20	
8325.	4.76	6.10	1.17	0.0	1.18	1.23	1.20	
8357.	4.76	6.02	1.17	0.0	1.18	1.23	1.20	
8389.	4.74	6.05	1.17	0.0	1.18	1.23	1.19	
8453.	4.75	6.06	1.17	0.0	1.18	1.23	1.19	
		1.38						END OF CHARGE
8293.	6.25	1.39	1.58	0.0	1.57	1.53	1.56	
8325.	6.24	1.40	1.58	0.0	1.57	1.53	1.56	
8357.	6.22	1.39	1.58	0.0	1.57	1.53	1.55	
8389.	6.19	1.38	1.58	0.0	1.57	1.51	1.54	
8453.	5.94	1.38	1.51	0.0	1.51	1.46	1.47	

PACK NO. 116A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
GULTON 20 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8113.	5.58	9.93	1.14	1.17	0.95	1.19	1.14	
8145.	5.57	9.93	1.12	1.17	0.96	1.19	1.14	
8177.	5.44	9.82	1.09	1.17	0.85	1.19	1.15	
8209.	5.28	9.76	1.10	1.17	0.69	1.19	1.14	
8273.	3.90	8.11	1.14	1.19	0.80	1.21	1.16	
		2.30						END OF CHARGE
8113.	7.73	2.07	1.43	1.61	1.48	1.63	1.57	
8145.	7.72	2.15	1.43	1.61	1.48	1.62	1.57	
8177.	7.71	2.09	1.43	1.61	1.46	1.62	1.57	
8209.	7.69	2.00	1.44	1.61	1.45	1.63	1.57	
8273.	7.58	2.31	1.43	1.58	0.0	1.58	1.52	

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PACK NO. 115B DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
GULTON 4 A.H. COMMERCIAL PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
13713.	6.30	1.17	1.26	1.25	1.26	1.26	1.25	
13747.	6.27	1.18	1.25	1.24	1.26	1.26	1.24	
13777.	6.24	1.18	1.25	1.24	1.25	1.26	1.24	
13808.	6.25	1.18	1.25	1.24	1.25	1.25	1.24	
13841.	6.26	1.18	1.24	1.25	1.26	0.0	1.24	
13873.	6.26	1.18	1.26	1.24	1.25	1.25	1.24	
13971.	6.25	1.18	1.25	1.24	1.25	1.25	1.24	
14000.	6.24	1.19	1.25	1.24	1.25	1.25	1.24	
14034.	6.23	1.18	1.25	1.23	1.25	1.25	1.24	
		0.69						END OF CHARGE
13713.	7.88	0.53	1.54	1.61	1.53	1.62	1.54	
13747.	7.85	0.50	1.53	1.60	1.52	1.62	1.54	
13777.	7.84	0.55	1.53	1.60	1.52	1.61	1.54	
13808.	7.85	0.54	1.53	1.60	1.52	1.62	1.54	
13841.	7.83	0.52	1.53	1.59	1.51	1.61	1.54	
13873.	7.84	0.55	1.53	1.60	1.52	1.61	1.54	
13971.	7.85	0.59	1.53	1.60	1.52	1.61	1.54	
14000.	7.86	0.59	1.53	1.60	1.52	1.61	1.54	
14034.	7.87	0.60	1.52	1.59	1.51	1.59	1.58	

PACK NO. 126B DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
GUELTON 4 A.H. COMMERCIAL PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
14195.	5.96	1.99	1.19	1.20	1.19	1.20	1.18	
14229.	5.95	2.01	1.19	1.20	1.19	1.20	1.18	
14259.	5.93	2.02	1.19	1.19	1.19	1.19	1.18	
14290.	5.94	2.01	1.19	1.20	1.19	1.19	1.18	
14323.	5.96	2.01	1.19	1.20	1.19	1.19	1.19	
14355.	5.97	1.99	1.20	1.20	1.19	1.19	1.19	
14453.	5.97	2.00	1.19	1.20	1.19	1.19	1.18	
14482.	5.97	2.01	1.19	1.20	1.19	1.19	1.18	

		1.15						END OF CHARGE
14195.	7.74	0.63	1.56	1.53	1.55	1.56	1.53	
14229.	7.75	0.64	1.56	1.53	1.55	1.56	1.53	
14259.	7.75	0.63	1.56	1.53	1.56	1.57	1.53	
14290.	7.75	0.63	1.56	1.53	1.56	1.57	1.52	
14323.	7.76	0.64	1.56	1.53	1.56	1.57	1.53	
14355.	7.75	0.66	1.56	1.53	1.56	1.57	1.52	
14453.	7.77	0.65	1.56	1.53	1.56	1.57	1.53	
14468.	7.90	0.64	1.55	1.52	1.54	1.55	1.52	
14482.	7.78	0.65	1.57	1.53	1.56	1.57	1.53	

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PACK NO. 4B DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C
GULTON 4 A.H. COMMERCIAL PERCENT OF RECHARGE 125 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
13971.	5.73	2.01	1.15	1.16	1.17	1.12	1.15	
14003.	5.74	2.01	1.16	1.16	1.16	1.12	1.15	
14035.	5.73	2.02	1.15	1.16	1.17	1.11	1.15	
14068.	5.72	2.02	1.15	1.16	1.17	1.11	1.15	
14099.	5.72	2.01	1.14	1.16	1.17	1.11	1.15	
14131.	5.72	2.02	1.15	1.16	1.17	1.11	1.16	
14164.	5.74	1.99	1.15	1.17	1.17	1.12	1.16	
14227.	5.74	1.99	1.15	1.17	1.17	1.12	1.16	
14323.	5.79	1.96	1.16	1.18	1.18	1.13	1.16	
14355.	5.75	1.96	1.16	1.17	1.17	1.12	1.15	
14387.	5.73	1.97	1.15	1.17	1.17	1.12	1.15	
		1.25						END OF CHARGE
13971.	7.45	1.16	1.49	1.47	1.48	1.56	1.47	
14003.	7.46	1.19	1.50	1.47	1.47	1.56	1.47	
14035.	7.45	1.16	1.49	1.47	1.48	1.56	1.47	
14068.	7.45	1.17	1.49	1.47	1.48	1.56	1.47	
14099.	7.44	1.19	1.49	1.47	1.48	1.56	1.47	
14131.	7.46	1.15	1.49	1.47	1.49	1.56	1.48	
14164.	7.41	0.96	1.48	1.46	1.48	1.55	1.47	
14227.	7.42	0.97	1.48	1.47	1.47	1.55	1.47	
14323.	7.52	1.13	1.47	1.46	1.45	1.54	1.45	
14355.	7.45	1.16	1.49	1.48	1.48	1.56	1.47	
14387.	7.45	1.17	1.49	1.48	1.48	1.56	1.47	

PACK NO. 28B
GULTON 4 A.H. COMMERCIAL
DEPTH OF DISCHARGE 15.
PERCENT OF RECHARGE 160
TEST TEMPERATURE 40. C
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
13603.	5.98	1.19	1.19	1.21	1.20	1.18	1.20	
13635.	5.97	1.19	1.20	1.21	1.20	1.17	1.19	
13667.	6.03	1.20	1.20	1.22	1.21	1.20	1.20	
13700.	5.95	1.20	1.19	1.21	1.20	1.17	1.19	
13731.	5.95	1.20	1.19	1.21	1.21	1.17	1.20	
13763.	5.95	1.21	1.19	1.21	1.20	1.18	1.20	
13796.	5.99	1.19	1.20	1.22	1.21	1.19	1.20	
13859.	5.97	1.18	1.20	1.21	1.21	1.19	1.20	
13955.	5.97	1.17	1.19	1.21	1.20	1.18	1.19	
13987.	5.95	1.17	1.19	1.21	1.20	1.17	1.19	
14019.	5.95	1.18	1.20	1.20	1.21	1.17	1.19	
		0.96						END OF CHARGE
13603.	7.33	0.93	1.48	1.46	1.40	1.46	1.47	
13635.	7.33	0.94	1.49	1.46	1.46	1.45	1.48	
13667.	7.32	0.93	1.49	1.46	1.46	1.45	1.47	
13700.	7.31	0.95	1.48	1.46	1.46	1.45	1.47	
13731.	7.31	0.94	1.48	1.47	1.47	1.45	1.48	
13763.	7.32	0.95	1.48	1.47	1.47	1.45	1.48	
13796.	7.34	1.01	1.49	1.47	1.47	1.45	1.48	
13859.	7.34	1.01	1.50	1.47	1.47	1.45	1.49	
13955.	7.49	0.94	1.47	1.46	1.44	1.43	1.45	
13987.	7.32	0.95	1.49	1.47	1.47	1.45	1.48	
14019.	7.33	0.96	1.49	1.47	1.47	1.44	1.48	

COU[illegible]R DEPTH OF DISCHARGE 30 ORBIT PERIOD 90 MINUTES

SON[illegible] 5 A.H. TEST TEMPERATURE 25° C

CYCLE NO.	PACK VOLTAGE	CURRENT	CLM	CELL VOLTAGES 1	2	3	4	5	
12[illegible]	5.53	3.00	-0.076	1.[illegible]	1.15	1.13	1.05	1.14	
12[illegible]	5.63		-0.077	1.[illegible]	1.16	1.14	1.08	1.15	
12880	5.55		-0.073	1.17	1.15	1.12	1.05	1.14	END OF DISCHARGE
12920	5.62		-0.070	1.18	1.17	1.13	1.07	1.15	
12960	5.49		-0.074	1.18	1.15	1.10	1.01	1.13	
13000	5.49		-0.073	1.18	1.16	1.10	1.03	1.12	
13020	5.56		-0.068	1.19	1.16	1.11	1.06	1.14	
									TIME TO START OF TRICKLE CHARGE

12800	8.00	0.30	+0.853	1.42	1.44	1.43	1.44	1.44	30:50	
12840			+0.955	1.40	1.41	1.41	1.43	1.41	31:20	
12880			+0.991	1.40	1.40	1.40	1.41	1.40	32:20	
12920			+1.009	1.39	1.39	1.39	1.41	1.40	34:50	
12960			+1.002	1.40	1.39	1.40	1.40	1.40	32:50	
13000			+1.041	1.39	1.39	1.39	1.39	1.39	37:00	END OF CHARGE
13020			+1.085	1.38	1.38	1.37	1.39	1.38	45:00	

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PACK NO. 101B
GULTON 12 A.H.
DEPTH OF DISCHARGE 25.
PERCENT OF RECHARGE 115
TEST TEMPERATURE 0. C
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
11763.	4.78	5.96	1.21	1.18	1.20	0.0	1.19	
11797.	4.77	5.97	1.21	1.18	1.21	0.0	1.19	
11827.	4.76	5.97	1.20	1.18	1.20	0.0	1.18	
11858.	4.76	5.96	1.20	1.18	1.21	0.0	1.19	
11891.	4.78	5.97	1.21	1.18	1.21	0.0	1.19	
11923.	4.77	5.97	1.21	1.18	1.21	0.0	1.19	
12021.	4.77	5.97	1.21	1.19	1.21	0.0	1.19	
12050.	4.77	5.97	1.21	1.00	1.22	0.0	1.20	
12084.	4.75	5.93	1.20	1.18	1.20	0.0	1.18	
								END OF CHARGE
		3.45						
11763.	6.26	1.72	1.55	1.61	1.52	0.0	1.57	
11797.	6.26	1.75	1.55	1.61	1.53	0.0	1.57	
11827.	6.28	1.71	1.55	1.63	1.53	0.0	1.57	
11858.	6.26	1.73	1.55	1.62	1.53	0.0	1.57	
11891.	6.28	1.76	1.55	1.62	1.54	0.0	1.58	
11923.	6.26	1.77	1.55	1.62	1.53	0.0	1.57	
12021.	6.28	1.79	1.55	1.62	1.54	0.0	1.58	
12050.	6.29	1.82	1.55	1.63	1.54	0.0	1.59	
12084.	6.35	1.74	1.54	1.61	1.52	0.0	1.56	

PACK NO. 27B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 25. C
GULTON 12 A.H. — PERCENT OF RECHARGE 125 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
10907.	4.51	5.56	1.17	1.07	0.0	1.13	1.14	
10939.	4.45	5.52	1.17	1.03	0.0	1.12	1.14	
10972.	4.52	5.57	1.17	1.08	0.0	1.13	1.15	
10989.	4.32	5.42	1.17	0.92	0.0	1.11	1.14	
11021.	4.43	5.50	1.16	1.08	0.0	1.08	1.14	
11053.	4.58	5.62	1.17	1.14	0.0	1.14	1.15	
11213.	4.45	5.56	1.17	1.06	0.0	1.10	1.13	
11245.	4.41	5.54	1.17	1.03	0.0	1.10	1.13	
11277.	4.41	5.50	1.18	1.03	0.0	1.10	1.13	
		3.75						END OF CHARGE
10907.	5.98	2.32	1.49	1.48	0.0	1.48	1.52	
10939.	5.97	2.35	1.49	1.48	0.0	1.47	1.53	
10972.	5.98	2.52	1.49	1.49	0.0	1.48	1.53	
10989.	5.96	2.45	1.49	1.47	0.0	1.48	1.53	
11021.	5.99	2.31	1.49	1.51	0.0	1.48	1.54	
11053.	6.03	2.62	1.49	1.51	0.0	1.49	1.54	
11213.	6.11	2.54	1.48	1.48	0.0	1.47	1.52	
11245.	6.10	2.55	1.48	1.48	0.0	1.46	1.51	
11277.	6.00	2.53	1.50	1.50	0.0	1.49	1.54	

PACK NO. 16B — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 0. C
GULTON 12 A.H. — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
10906.	6.16	3.62	1.23	1.20	1.24	1.24	1.23	
10938.	6.18	3.62	1.24	1.24	1.24	1.24	1.24	
10970.	6.17	3.63	1.23	1.24	1.24	1.24	1.23	
11003.	6.17	3.62	1.23	1.24	1.24	1.24	1.24	
11034.	6.16	3.63	1.23	1.24	1.24	1.24	1.24	
11066.	6.12	3.65	1.23	1.24	1.24	1.23	1.23	
11099.	6.21	3.62	1.24	1.25	1.25	1.25	1.25	
11162.	6.20	3.57	1.24	1.25	1.25	1.25	1.25	
11258.	6.15	3.62	1.23	1.24	1.24	1.24	1.23	
11290.	6.16	3.60	1.23	1.24	1.24	1.24	1.23	
11322.	6.17	3.59	1.24	1.25	1.25	1.24	1.24	
		2.07						END OF CHARGE
10906.	7.39	1.12	1.54	1.47	1.46	1.46	1.48	
10938.	7.40	1.11	1.54	1.47	1.45	1.46	1.48	
10970.	7.39	1.11	1.54	1.47	1.46	1.46	1.48	
11003.	7.40	1.11	1.54	1.47	1.46	1.46	1.49	
11034.	7.41	1.10	1.54	1.48	1.46	1.47	1.49	
11066.	7.33	1.34	1.53	1.46	1.45	1.45	1.48	
11099.	7.44	1.04	1.55	1.48	1.47	1.47	1.50	
11162.	7.44	1.06	1.56	1.48	1.47	1.47	1.50	
11258.	7.51	1.08	1.53	1.46	1.43	1.44	1.45	
11290.	7.39	1.05	1.55	1.47	1.46	1.46	1.48	
11322.	7.37	1.04	1.00	1.48	1.46	1.46	1.48	

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PACK NO. 23A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C

GULTON 6 A.H. 3RD ELECTRODE RES 12 18 20 29 24 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
10338.	5.88	3.00	0.211	0.279	0.213	0.197	0.224	1.19	1.19	1.17	1.18	1.14	
10375.	4.70	2.98	0.180	0.269	0.205	0.203	0.0	1.18	1.19	1.17	1.17	0.01	
10402.	4.67	2.99	0.199	0.273	0.199	0.192	0.0	1.18	1.18	1.17	1.15	0.01	
10434.	4.70	2.99	0.204	0.271	0.199	0.167	0.0	1.18	1.19	1.18	1.16	0.01	
10466.	4.66	3.00	0.196	0.261	0.185	0.176	0.0	1.17	1.17	1.16	1.16	0.01	
10499.	4.65	2.98	0.201	0.261	0.178	0.139	0.0	1.18	1.17	1.16	1.14	0.01	
10527.	4.56	3.04	0.158	0.253	0.178	0.139	0.0	1.14	1.15	1.15	1.13	0.01	
10626.	4.59	2.99	0.185	0.257	0.138	0.008	0.0	1.19	1.18	1.17	1.06	0.01	
10659.	4.60	3.02	0.191	0.251	0.144	0.064	0.0	1.16	1.17	1.15	1.12	0.01	
10723.	4.00	2.99	0.0	0.266	0.170	0.202	0.0	1.22	1.24	1.23	1.24	0.01	
		3.00											END OF CHARGE
10338.	5.51	0.01	0.230	0.303	0.267	0.273	0.0	1.38	1.38	1.37	1.37	0.02	
10375.	5.67	0.65	0.202	0.283	0.258	0.264	0.0	1.41	1.42	1.41	1.40	0.01	
10402.	5.49	0.01	0.219	0.305	0.261	0.250	0.0	1.37	1.37	1.37	1.36	0.01	
10434.	5.49	0.01	0.229	0.301	0.259	0.231	0.0	1.37	1.37	1.37	1.36	0.0	
10466.	5.47	0.02	0.220	0.301	0.247	0.236	0.0	1.36	1.36	1.36	1.36	0.0	
10499.	5.47	0.01	0.252	0.301	0.243	0.197	0.0	1.37	1.37	1.36	1.36	0.0	
10527.	5.47	0.02	0.195	0.298	0.246	0.204	0.0	1.36	1.37	1.37	1.36	0.0	
10626.	5.47	0.02	0.191	0.292	0.196	0.051	0.0	1.37	1.37	1.37	1.35	0.0	
10659.	5.45	0.0	0.213	0.304	0.227	0.123	0.0	1.38	1.38	1.38	1.38	0.02	
10723.	5.47	0.02	0.003	0.286	0.211	0.241	0.008	1.36	1.37	1.36	1.36	0.01	

PACK NO. 59A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C

GULTON 6 AH. 3RD ELECTRODE RES 10 10 10 10 10 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
8796.	4.84	3.03	0.113	0.081	0.0	0.071	0.125	1.21	1.20	0.0	1.20	1.22	
8833.	4.83	2.96	0.114	0.077	0.0	0.071	0.127	1.21	1.20	0.0	1.20	1.22	
8860.	4.82	2.97	0.112	0.076	0.0	0.071	0.124	1.21	1.19	0.0	1.20	1.21	
8892.	4.84	2.93	0.115	0.075	0.0	0.070	0.123	1.21	1.20	0.0	1.20	1.21	
8924.	4.83	2.91	0.115	0.071	0.0	0.071	0.119	1.21	1.19	0.0	1.20	1.21	
8957.	4.82	2.97	0.113	0.072	0.0	0.071	0.121	1.19	1.20	0.0	1.20	1.21	
8985.	4.81	2.96	0.113	0.069	0.0	0.071	0.119	1.21	1.19	0.0	1.19	1.21	
9084.	4.80	3.00	0.105	0.069	0.0	0.078	0.117	1.20	1.19	0.0	1.19	1.21	
9117.	4.79	2.91	0.103	0.067	0.0	0.075	0.116	1.20	1.18	0.0	1.19	1.21	
9181.	4.79	3.00	0.103	0.065	0.0	0.081	0.114	1.20	1.19	0.0	1.19	1.21	
		3.00											END OF CHARGE
8796.	5.73	0.18	0.111	0.125	0.0	0.111	0.157	1.42	1.43	0.0	1.43	1.44	
8833.	5.74	0.20	0.115	0.117	0.0	0.111	0.159	1.43	1.43	0.0	1.43	1.44	
8860.	5.74	0.19	0.120	0.118	0.0	0.113	0.158	1.43	1.43	0.0	1.43	1.44	
8892.	5.74	0.19	0.120	0.116	0.0	0.113	0.155	1.43	1.43	0.0	1.43	1.44	
8924.	5.74	0.20	0.119	0.112	0.0	0.114	0.151	1.43	1.43	0.0	1.44	1.44	
8957.	5.75	0.21	0.114	0.114	0.0	0.120	0.155	1.43	1.43	0.0	1.44	1.44	
8985.	5.75	0.20	0.115	0.111	0.0	0.120	0.153	1.43	1.43	0.0	1.44	1.44	
9084.	5.74	0.19	0.109	0.109	0.0	0.127	0.151	1.42	1.42	0.0	1.44	1.44	
9117.	5.73	0.21	0.125	0.121	0.0	0.144	0.179	1.44	1.44	0.0	1.46	1.41	
9181.	5.69	0.16	0.108	0.105	0.0	0.124	0.154	1.42	1.42	0.0	1.42	1.43	

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PACK NO. 35A DEPTH OF DISCHARGE 15. TEST TEMPERATURE 40. C

GULTON A.H. 3RD ELECTRODE RES 47 47 47 47 47 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTRODE					CELL VOLTAGE					END OF DISCHARGE AH OUT
		1.80	1	2	3	4	5	1	2	3	4	5	
8358.	5.90	1.81	0.137	0.128	0.121	0.114	0.149	1.18	1.18	1.18	1.17	1.18	
8395.	5.86	1.80	0.134	0.119	0.116	0.118	0.144	1.17	1.17	1.17	1.16	1.17	
8422.	5.85	1.80	0.137	0.119	0.115	0.104	0.143	1.17	1.17	1.17	1.15	1.17	
8395.	5.86	1.80	0.134	0.119	0.116	0.118	0.144	1.17	1.17	1.17	1.16	1.17	
8405.	5.91	1.81	0.144	0.128	0.123	0.128	0.145	1.18	1.18	1.18	1.17	1.18	
8422.	5.85	1.80	0.137	0.119	0.115	0.104	0.143	1.17	1.17	1.17	1.15	1.17	
8597.	5.97	1.81	0.144	0.121	0.106	0.108	0.173	1.19	1.19	1.20	1.18	1.19	
8630.	5.92	1.83	0.150	0.124	0.115	0.089	0.161	1.19	1.19	1.19	1.16	1.18	
8694.	5.95	1.80	0.138	0.134	0.121	0.090	0.155	1.20	1.20	1.20	1.16	1.19	
		1.80											END OF CHARGE
8358.	6.84	0.06	0.254	0.225	0.227	0.242	0.353	1.37	1.37	1.37	1.36	1.37	
8395.	6.84	0.05	0.257	0.224	0.224	0.254	0.351	1.37	1.37	1.37	1.35	1.37	
8358.	6.84	0.06	0.254	0.225	0.227	0.242	0.353	1.37	1.37	1.37	1.36	1.37	
8395.	6.84	0.05	0.257	0.224	0.224	0.254	0.351	1.37	1.37	1.37	1.35	1.37	
8405.	6.85	0.05	0.268	0.231	0.229	0.272	0.368	1.37	1.37	1.37	1.36	1.37	
8422.	6.83	0.05	0.258	0.219	0.222	0.220	0.349	1.36	1.36	1.37	1.35	1.37	
8597.	6.83	0.05	0.254	0.210	0.210	0.229	0.383	1.36	1.36	1.37	1.35	1.36	
8630.	6.83	0.05	0.282	0.241	0.251	0.211	0.404	1.38	1.38	1.38	1.37	1.34	
8694.	6.82	0.05	0.279	0.239	0.233	0.190	0.371	1.36	1.36	1.37	1.34	1.36	

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PACK NO. 13B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C

GULTON 6 A.H. HSI — PERCENT OF RECHARGE 115 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
10872.	6.02	2.99	1.21	1.20	1.20	1.20	1.20	
10906.	6.01	3.00	1.21	1.21	1.21	1.20	1.20	
10936.	5.99	3.00	1.20	1.20	1.20	1.20	1.20	
10967.	6.00	3.00	1.20	1.21	1.21	1.20	1.20	
11000.	6.01	2.99	1.21	1.21	1.21	1.21	1.21	
11032.	6.01	3.03	1.21	1.21	1.21	1.21	1.21	
11130.	6.01	3.04	1.21	1.21	1.21	1.21	1.21	
11159.	6.01	3.04	1.21	1.21	1.21	1.21	1.21	
11193.	5.98	2.99	1.20	1.20	1.20	1.20	1.20	
11257.	6.02	2.99	1.21	1.22	1.21	1.21	1.21	
		1.73						END OF CHARGE
10872.	7.68	0.77	1.53	1.54	1.52	1.53	1.56	
10906.	7.68	0.78	1.53	1.54	1.52	1.53	1.56	
10936.	7.69	0.76	1.53	1.54	1.53	1.53	1.56	
10967.	7.69	0.80	1.53	1.55	1.53	1.54	1.57	
11000.	7.67	0.77	1.52	1.55	1.53	1.53	1.57	
11032.	7.69	0.32	1.53	1.55	1.53	1.54	1.57	
11130.	7.70	0.82	1.53	1.55	1.53	1.54	1.58	
11159.	7.70	0.84	1.53	1.56	1.53	1.54	1.58	
11193.	7.84	0.79	1.51	1.53	1.49	1.52	1.54	
11257.	7.69	0.79	1.53	1.56	1.52	1.54	1.58	

PACK NO. 103A DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 110 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
9905.	6.10	1.49	1.22	1.22	1.23	1.23	1.21	
9937.	6.09	1.51	1.22	1.21	1.23	1.23	1.21	
9969.	6.08	1.51	1.22	1.22	1.23	1.22	1.23	
10001.	6.07	1.50	1.21	1.21	1.22	1.22	1.22	
10033.	6.05	1.51	1.21	1.21	1.23	1.22	1.22	
10066.	6.07	1.50	1.21	1.21	1.23	1.22	1.22	
10155.	6.07	1.50	1.21	1.22	1.23	1.22	1.23	
10225.	6.08	1.49	1.21	1.21	1.22	1.22	1.21	
10289.	6.10	1.49	1.22	1.22	1.23	1.23	1.21	
		0.83						END OF CHARGE
9905.	7.16	0.52	1.44	1.43	1.45	1.42	1.41	
9937.	7.15	0.52	1.43	1.43	1.45	1.43	1.41	
9969.	7.16	0.50	1.44	1.43	1.45	1.42	1.43	
10001.	7.15	0.51	1.44	1.43	1.45	1.42	1.43	
10033.	7.12	0.52	1.43	1.43	1.45	1.42	1.43	
10066.	7.14	0.52	1.43	1.43	1.44	1.42	1.42	
10155.	7.15	0.53	1.43	1.44	1.45	1.43	1.43	
10225.	7.26	0.51	1.41	1.42	1.42	1.40	1.40	
10289.	7.18	0.52	1.44	1.43	1.45	1.43	1.42	

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PACK NO. 106A — DEPTH OF DISCHARGE 15. — TEST TEMPERATURE 25. C
G.E. 5 A.H. NIMBUS — PERCENT OF RECHARGE 120 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
9937.	6.04	1.49	1.20	1.19	1.22	1.23	1.21	
9969.	6.02	1.50	1.20	1.18	1.21	1.23	1.21	
10002.	6.06	1.50	1.21	1.19	1.22	1.23	1.21	
10033.	6.03	1.49	1.20	1.18	1.21	1.22	1.21	
10065.	6.01	1.50	1.20	1.17	1.21	1.22	1.22	
10097.	6.05	1.49	1.21	1.19	1.22	1.22	1.21	
10257.	6.04	1.49	1.20	1.18	1.21	1.22	1.22	
10289.	6.05	1.49	1.20	1.18	1.21	1.22	1.22	
10321.	6.04	1.49	1.20	1.19	1.21	1.23	1.21	
		0.90						END OF CHARGE
9937.	7.23	0.89	1.44	1.43	1.44	1.46	1.44	
9969.	7.21	0.89	1.44	1.43	1.44	1.46	1.45	
10002.	7.22	0.89	1.44	1.44	1.44	1.46	1.44	
10033.	7.22	0.89	1.44	1.44	1.44	1.46	1.45	
10065.	7.23	0.89	1.44	1.43	1.43	1.46	1.45	
10097.	7.24	0.89	1.45	1.44	1.44	1.46	1.45	
10257.	7.24	0.89	1.42	1.42	1.42	1.43	1.48	
10289.	7.24	0.89	1.42	1.42	1.42	1.43	1.48	
10321.	7.24	0.89	1.44	1.44	1.44	1.46	1.44	

PACK NO. 107A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
G.E. 5 A.H. NIMBUS — PERCENT OF RECHARGE 110 — ORBIT PERIOD 1.5 HRS.

NO.	VOLTAGE	2.50	1	2	3	4	5	PRESSURE	DISCHARGE
9229.	5.79	2.47	1.17	1.15	1.16	1.15	1.18	11.000	
9261.	5.98	2.46	1.20	1.19	1.20	1.19	1.20	10.000	
9293.	5.78	2.47	1.17	1.15	1.15	1.14	1.18	10.000	
9326.	5.79	2.47	1.17	1.15	1.16	1.15	1.18	10.000	
9357.	5.76	2.47	1.17	1.15	1.15	1.14	1.18	11.000	
9389.	5.69	2.47	1.16	1.13	1.13	1.12	1.18	10.000	
9422.	5.73	2.46	1.16	1.14	1.14	1.14	1.18	10.000	
9485.	5.73	2.45	1.17	1.14	1.14	1.13	1.18	10.000	
9581.	5.64	2.44	1.16	1.12	1.10	1.11	1.17	10.000	
9613.	5.59	2.45	1.15	1.10	1.09	1.10	0.75	10.000	
9645.	5.69	2.44	1.16	1.13	1.13	1.13	1.18	10.000	
		1.38							END OF CHARGE
9229.	7.13	0.85	1.43	1.44	1.43	1.42	1.43	11.000	
9261.	7.16	0.83	1.44	1.43	1.43	1.43	1.43	11.000	
9293.	7.14	0.84	1.43	1.43	1.43	1.42	1.43	10.000	
9326.	7.14	0.83	1.43	1.44	1.43	1.43	1.43	11.000	
9357.	7.14	0.85	1.43	1.44	1.43	1.43	1.43	10.000	
9389.	7.12	0.85	1.43	1.44	1.43	1.43	1.43	11.000	
9422.	7.15	0.86	1.44	1.44	1.44	1.43	1.44	10.000	
9485.	7.14	0.83	1.43	1.44	1.44	1.43	1.43	10.000	
9581.	7.34	0.93	1.42	1.43	1.41	1.41	1.40	10.000	
9613.	7.14	0.84	1.43	1.44	1.44	1.43	1.23	10.000	
9645.	7.17	0.84	1.44	1.45	1.44	1.44	1.43	10.000	

PACK NO. 104B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 25. C
G.E. 5 A.H. NIMBUS — PERCENT OF RECHARGE 120 — ORBIT PERIOD 1.5 HRS.

NO.	VOLTAGE	2.50	1	2	3	4	5	PRESSURE	DISCHARGE
9194.	4.34	2.48	1.11	1.12	0.98	0.0	1.14	32.000	
9226.	4.12	2.49	1.11	1.10	0.92	0.0	1.00	32.000	
9258.	4.18	2.47	1.08	1.10	0.95	0.0	1.05	32.000	
9291.	3.98	2.47	1.04	1.09	0.93	0.0	0.94	32.000	
9322.	4.27	2.49	1.05	1.12	1.05	0.0	1.08	32.000	
9354.	3.79	2.45	1.00	1.03	0.84	0.0	0.94	32.000	
9387.	4.40	2.49	1.11	1.13	1.05	0.0	1.13	32.000	
9450.	4.18	2.48	1.10	1.13	0.95	0.0	1.03	32.000	
9546.	4.27	2.51	1.08	1.13	0.98	0.0	1.09	32.000	
9578.	4.39	2.52	1.08	1.14	1.07	0.0	1.12	32.000	
9610.	4.24	2.53	1.07	1.13	0.99	0.0	1.08	32.000	
									END OF CHARGE
		1.50							
9194.	5.92	1.52	1.48	1.48	1.48	0.0	1.48	32.000	
9226.	5.91	1.56	1.48	1.40	1.49	0.0	1.47	32.000	
9258.	5.91	1.49	1.49	1.49	1.49	0.0	1.45	32.000	
9291.	5.91	1.47	1.48	1.49	1.49	0.0	1.46	32.000	
9322.	5.92	1.48	1.48	1.49	1.50	0.0	1.47	32.000	
9354.	5.87	1.46	1.47	1.48	1.49	0.0	1.46	32.000	
9387.	5.94	1.50	1.49	1.50	1.49	0.0	1.48	32.000	
9450.	5.91	1.52	1.49	1.49	1.48	0.0	1.46	32.000	
9546.	6.10	1.53	1.47	1.49	1.47	0.0	1.44	32.000	
9578.	5.95	1.51	1.49	1.50	1.50	0.0	1.48	32.000	
9610.	5.94	1.55	1.50	1.51	1.49	0.0	1.47	32.000	

PACK NO. 120A — DEPTH OF DISCHARGE , — TEST TEMPERATURE 25. C

GULTON 5 A.H. NIMBUS — PERCEN OF RECHARGE 1.0 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
9849.	4.90	1.47	1.23	0.0	1.2	1.24	1.23	
9881.	4.88	1.48	1.23	0.0	1.21	1.23	1.23	
9914.	4.92	1.48	1.23	0.0	1.22	1.23	1.2	
9945.	4.93	1.47	1.24	0.0	1.23	1.23	1.22	
9977.	4.92	1.48	1.24	0.0	1.24	1.23	1.22	
10009.	4.92	1.47	1.24	0.0	1.23	1.23	1.23	
10169.	4.93	1.47	1.24	0.0	1.22	1.23	1.22	
10201.	4.94	1.47	1.23	0.0	1.23	1.23	0.67	
10233.	4.91	1.46	1.23	0.0	1.24	1.24	1.22	
		0.90						END OF CHARGE
9849.	5.86	0.90	1.43	0.0	1.44	1.51	1.47	
9881.	5.85	0.91	1.44	0.0	1.43	1.50	1.46	
9914.	5.86	0.91	1.44	0.0	1.44	1.50	1.47	
9945.	5.87	0.89	1.45	0.0	1.45	1.51	1.46	
9977.	5.87	0.90	1.45	0.0	1.46	1.50	1.46	
10009.	5.87	0.90	1.44	0.0	1.45	1.51	1.46	
10169.	5.98	0.91	1.42	0.0	1.43	1.48	1.43	
10201.	5.99	0.91	1.43	0.0	1.44	1.48	1.42	
10233.	5.86	0.89	1.44	0.02	1.47	1.50	1.45	

PACK NO. 117A DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 110 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
9503.	6.09	1.50	1.23	1.21	1.22	1.22	1.22	
9535.	6.08	1.51	1.22	1.21	1.23	1.22	1.22	
9567.	6.11	1.42	1.23	1.22	1.22	1.23	1.21	
9599.	6.07	1.57	1.22	1.21	1.22	1.23	1.21	
9631.	6.08	1.46	1.23	1.21	1.21	1.23	1.21	
9664.	6.07	1.57	1.22	1.21	1.21	1.22	1.20	
9753.	6.08	1.50	1.22	1.21	1.21	1.22	1.20	
9823.	6.06	1.51	1.22	1.20	1.21	1.22	1.21	
9887.	6.07	1.50	1.22	1.22	1.22	1.22	1.22	
		0.83						END OF CHARGE
9503.	7.44	0.49	1.50	1.47	1.52	1.47	1.47	
9535.	7.42	0.50	1.50	1.47	1.51	1.47	1.47	
9567.	7.43	0.47	1.50	1.47	1.52	1.47	1.45	
9599.	7.43	0.45	1.50	1.47	1.52	1.48	1.46	
9631.	7.41	0.51	1.49	1.49	1.51	0.0	1.46	
9664.	7.44	0.49	1.50	1.48	1.51	1.48	1.46	
9753.	7.44	0.49	1.50	1.48	1.51	1.48	1.46	
9823.	7.44	0.50	1.48	1.46	1.49	1.45	1.49	
9887.	7.43	0.51	1.50	1.49	1.51	1.48	1.48	

PACK NO. 121A — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 0. C
GULTON 5 A.H. NIMBUS — PERCENT OF RECHARGE 120 — ORBIT PERIOD 1.5 HRS.

NO.	VOLTAGE	1.50	1	2	3	4	5	PRESSURE	DISCHARGE
9124.	4.65	2.47	0.0	1.17	1.17	1.18	1.18	13.000	
9156.	4.65	2.47	0.0	1.16	1.16	1.18	1.17	13.000	
9188.	4.64	2.47	0.0	1.17	1.17	1.17	1.17	13.000	
9221.	4.63	2.47	0.0	1.16	1.17	1.18	1.17	13.000	
9252.	4.62	2.48	0.0	1.17	1.17	1.18	1.17	13.000	
9284.	4.61	2.48	0.0	1.16	1.17	1.18	1.18	13.000	
9317.	4.63	2.47	0.0	1.17	1.17	1.18	1.18	13.000	
9380.	4.64	2.47	0.0	1.17	1.17	1.18	1.18	13.000	
9476.	4.61	2.47	0.0	1.16	1.00	1.18	1.17	13.000	
9508.	4.61	2.47	0.0	1.16	1.16	1.18	1.16	13.000	
9540.	4.62	2.46	0.0	1.17	1.17	1.18	1.17	13.000	
		1.38							END OF CHARGE
9124.	5.91	0.79	0.0	1.47	1.49	1.47	1.48	13.000	
9156.	5.91	0.78	0.0	1.47	1.48	1.47	1.48	13.000	
9188.	5.89	0.80	0.0	1.47	1.48	1.40	1.47	13.000	
9221.	5.90	0.79	0.0	1.47	1.49	1.47	1.48	13.000	
9252.	5.89	0.82	0.0	1.49	1.48	1.47	1.48	13.000	
9284.	5.89	0.80	0.0	1.47	1.49	1.47	1.48	13.000	
9317.	5.90	0.77	0.0	1.48	1.49	1.47	1.48	13.000	
9380.	5.91	0.79	0.0	1.48	1.49	1.47	1.48	13.000	
9476.	6.07	0.76	0.0	1.46	1.46	1.45	1.45	13.000	
9508.	5.91	0.88	0.0	1.48	1.49	1.47	1.47	13.000	
9540.	5.92	0.77	0.02	1.48	1.49	1.48	1.48	13.000	

PACK NO. 31B
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25.
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0. C
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8179.	4.66	1.50	1.18	1.14	1.17	1.17	0.0	
8211.	4.66	1.52	1.17	1.15	1.17	1.17	0.0	
8243.	4.58	1.51	1.16	1.12	1.16	1.16	0.0	
8275.	4.59	1.50	1.16	1.12	1.16	1.16	0.0	
8307.	4.60	1.50	1.17	1.13	1.17	1.16	0.0	
8340.	4.59	1.50	1.16	1.12	1.16	1.16	0.0	
8429.	4.58	1.52	1.16	1.12	1.16	1.16	0.0	
8450.	4.60	1.50	1.16	1.13	1.16	1.16	0.0	
		0.86						END OF CHARGE
8179.	6.20	0.44	1.55	1.53	1.56	1.54	0.0	
8211.	6.20	0.45	1.55	1.54	1.57	1.54	0.0	
8243.	5.98	0.39	1.50	1.49	1.51	1.49	0.0	
8275.	5.99	0.40	1.50	1.49	1.51	1.50	0.0	
8307.	6.00	0.39	1.51	1.50	1.52	1.50	0.0	
8340.	5.99	0.40	1.51	1.49	1.51	1.50	0.0	
8429.	6.00	0.41	1.51	1.49	1.52	1.50	0.0	
8450.	6.14	0.41	1.50	1.48	1.50	1.48	0.02	

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PACK NO. 438 DEPTH OF DISCHARGE 15. TEST TEMPERATURE 0. C
SONOTONE 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8500.	6.06	0.90	1.22	1.21	1.21	1.22	1.21	
8532.	6.05	0.91	1.21	1.21	1.22	1.22	1.21	
8564.	6.04	0.91	1.21	1.21	1.22	1.22	1.21	
8596.	6.03	0.91	1.21	1.21	1.22	1.22	1.20	
8628.	6.00	0.91	1.40	1.38	1.40	1.39	1.33	
8661.	6.03	0.91	1.21	1.21	1.22	1.22	1.20	
8750.	6.03	0.91	1.21	1.21	1.22	1.22	1.21	
8771.	6.07	0.90	1.21	1.21	1.22	1.22	1.23	
		0.52						END OF CHARGE
8500.	7.67	0.20	1.49	1.50	1.50	1.70	1.49	
8532.	7.66	0.24	1.48	1.51	1.51	1.69	1.48	
8564.	7.67	0.24	1.48	1.51	1.51	1.70	1.48	
8596.	7.67	0.24	1.48	1.51	1.51	1.70	1.48	
8628.	7.66	0.24	1.48	1.51	1.51	1.70	1.48	
8661.	7.65	0.24	1.48	1.51	1.51	1.70	1.47	
8750.	7.67	0.25	1.49	1.52	1.52	1.71	1.48	
8771.	7.89	0.27	1.48	1.51	1.50	1.69	1.49	

PACK NO. 3B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 25. C
SONOTONE 3 A.H. — PERCENT OF RECHARGE 125 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
8938.	5.44	1.49	1.06	1.10	1.04	1.13	1.12	
8970.	5.41	1.49	1.03	1.10	1.04	1.13	1.12	
9003.	5.46	1.50	1.08	1.10	1.04	1.13	1.13	
9034.	5.41	1.49	1.06	1.10	1.04	1.11	1.12	
9066.	5.36	1.49	1.05	1.09	1.04	1.10	1.12	
9098.	5.51	1.50	1.14	1.10	1.06	1.10	1.13	
9210.	5.40	1.50	1.10	1.06	1.06	1.12	1.08	
9242.	5.38	1.49	1.06	1.06	1.06	1.11	1.11	
		0.94						END OF CHARGE
8938.	7.37	0.59	1.45	1.47	1.50	1.49	1.47	
8970.	7.36	0.59	1.44	1.47	1.50	1.49	1.47	
9003.	7.36	0.61	1.45	1.47	1.50	1.48	1.48	
9034.	7.35	0.59	1.45	1.47	1.50	1.48	1.48	
9066.	7.34	0.59	1.45	1.47	1.51	1.47	1.48	
9098.	7.42	0.73	1.46	1.49	1.52	1.49	1.49	
9210.	7.52	0.76	1.43	1.46	1.49	1.47	1.41	
9242.	7.52	0.73	1.43	1.46	1.49	1.46	1.43	

PACK NO. 92A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C

SONOTONE 5 A.H. STABISTOR PERCENT OF RECHARGE NA ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
7352.	4.48	2.53	1.11	1.11	1.13	1.13	0.0	
7384.	4.39	2.54	1.06	1.09	1.13	1.12	0.0	
7417.	4.38	2.54	1.09	1.07	1.13	1.11	0.0	
7448.	4.34	2.54	1.07	1.07	1.12	1.11	0.0	
7480.	4.30	2.54	1.05	1.06	1.11	1.10	0.0	
7512.	4.27	2.53	1.04	1.05	1.10	1.10	0.0	
7672.	4.04	2.53	1.02	1.01	0.95	1.08	0.0	
7704.	4.14	2.53	1.01	1.01	1.06	1.08	0.0	
7736.	4.17	2.52	1.02	1.02	1.08	1.08	0.0	
		5.00						END OF CHARGE
7352.	6.27	5.11	1.53	1.57	1.56	1.59	0.0	
7384.	6.25	5.11	1.52	1.58	1.56	1.59	0.0	
7417.	6.22	5.12	1.50	1.57	1.56	1.58	0.0	
7448.	6.20	5.12	1.49	1.57	1.55	1.59	0.0	
7480.	6.21	5.11	1.51	1.57	1.55	1.58	0.0	
7512.	6.20	5.11	1.50	1.56	1.55	1.58	0.0	
7672.	6.24	5.13	1.49	1.54	1.47	1.55	0.0	
7704.	6.24	5.13	1.47	1.55	1.48	1.54	0.0	
7736.	6.12	5.12	1.50	1.57	1.52	1.55	0.0	

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PACK NO. 33B
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20.
PERCENT OF DECHARGE NA

TEST TEMPERATURE 25. C
ORBIT PERIOD 24.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
447.	5.37	1.00	1.07	1.07	1.07	1.08	1.08	
455.	5.37	1.00	1.08	1.08	1.07	1.08	1.08	
463.	5.39	1.00	1.08	1.08	1.08	1.09	1.08	
471.	5.38	1.00	1.08	1.09	1.07	1.09	1.09	
		0.30						END OF CHARGE
447.	7.52	0.02	1.58	1.57	1.18	1.60	1.59	
455.	7.45	0.01	1.56	1.57	1.17	1.59	1.59	
463.	7.52	0.01	1.53	1.55	1.33	1.57	1.56	
471.	7.51	0.02	1.59	1.58	1.18	1.60	1.59	

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PACK NO. 69A DEPTH OF DISCHARGE 20. TEST TEMPERATURE 25. C
YARDNEY 5 A.H. PERCENT OF RECHARGE NA ORBIT PERIOD 24.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
447.	5.03	0.99	1.07	1.08	1.07	1.08	0.73	
455.	4.98	1.00	1.07	1.09	1.08	1.09	0.68	
463.	4.99	1.00	1.07	1.09	1.08	1.09	0.69	
471.	4.99	0.99	1.07	1.09	1.08	1.09	0.68	
		0.30						END OF CHARGE
447.	7.68	0.0	1.44	1.43	1.94	1.64	1.23	
455.	7.57	0.01	1.46	1.44	1.91	1.61	1.17	
463.	7.58	0.0	1.54	1.44	1.88	1.57	1.17	
471.	7.58	0.0	1.56	1.45	1.91	1.53	1.16	

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PACK NO. 76B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 25. C
GULTON 5.6 A.H. FRS — PERCENT OF RECHARGE 125 — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6349.	4.00	2.83	1.18	0.0	1.21	1.20	1.18	
6381.	4.05	2.60	0.99	0.0	1.05	1.04	0.99	
6413.	3.97	2.55	0.97	0.0	1.04	1.05	0.95	
6446.	3.97	2.53	0.98	0.0	1.04	1.02	0.95	
6535.	3.37	2.10	0.91	0.01	1.01	0.9[illegible]	0.55	
6605.	2.65	1.66	0.90	0.01	1.01	0.95	0.20	
		1.75						END OF CHARGE
6349.	5.79	0.97	1.44	0.01	1.47	1.44	1.43	
6381.	5.81	0.98	1.45	0.01	1.48	1.45	1.43	
6413.	5.81	1.04	1.45	0.02	1.49	1.45	1.44	
6446.	5.81	0.95	1.45	0.02	1.48	1.45	1.44	
6535.	5.76	0.84	1.44	0.02	1.46	1.44	1.43	
6605.	5.88	0.86	1.42	0.0	1.43	1.41	1.40	

PACK NO. 100B DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
GULTON 5.6 A.H. FRS PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6206.	5.77	2.77	1.17	1.15	1.15	1.15	1.15	
6238.	5.76	2.79	1.16	1.16	1.15	1.15	1.15	
6271.	5.77	2.79	1.16	1.16	1.15	1.15	1.14	
6302.	5.76	2.77	1.16	1.16	1.15	1.15	1.15	
6334.	5.75	2.80	1.16	1.15	1.15	1.15	1.15	
6366.	5.78	2.75	1.17	1.16	1.15	1.15	1.15	
6477.	5.77	2.77	1.16	1.16	1.15	1.15	1.15	
		1.61						END OF CHARGE
6206.	7.78	1.10	1.60	1.55	1.53	1.55	1.54	
6238.	7.76	1.03	1.59	1.55	1.53	1.55	1.54	
6271.	7.77	1.11	1.59	1.56	1.54	1.56	1.52	
6302.	7.77	1.07	1.59	1.56	1.54	1.56	1.53	
6334.	7.76	1.05	1.59	1.56	1.53	1.55	1.53	
6366.	7.78	1.14	1.59	1.56	1.54	1.56	1.53	
6477.	7.78	1.15	1.57	1.55	1.52	1.53	1.56	

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PACK NO. 44B DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C

GULTON 5.6 A.H. FRS PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6062.	5.58	2.76	1.09	1.13	1.13	1.11	1.13	
6094.	5.60	2.75	1.10	1.13	1.13	1.12	1.13	
6126.	5.55	2.76	1.08	1.13	1.12	1.10	1.12	
6159.	5.55	2.76	1.08	1.13	1.13	1.10	1.13	
6190.	5.56	2.76	1.09	1.13	1.13	1.11	1.13	
6222.	5.85	2.78	1.17	1.18	1.10	1.17	1.18	
6365.	5.76	2.79	1.16	1.16	1.15	1.16	1.15	
6397.	5.76	2.79	1.16	1.16	1.15	1.16	1.15	
6429.	5.75	2.80	1.16	1.16	1.15	1.16	1.15	
		1.61						END OF CHARGE
6062.	7.57	0.77	1.52	1.52	1.52	1.51	1.51	
6094.	7.58	0.71	1.52	1.51	1.51	1.51	1.52	
6126.	7.57	0.72	1.52	1.52	1.52	1.51	1.52	
6159.	7.58	0.72	1.52	1.52	1.52	1.51	1.52	
6190.	7.57	0.72	1.52	1.52	1.52	1.51	1.52	
6222.	7.54	0.88	1.52	1.51	1.52	1.51	1.52	
6365.	8.01	0.90	1.56	1.56	1.56	1.55	1.55	
6397.	7.87	0.91	1.58	1.58	1.59	1.58	1.58	
6429.	7.89	0.90	1.58	1.58	1.59	1.58	1.58	

PACK NO. 96C DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 125 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6259.	3.46	2.46	0.0	0.0	1.16	1.17	1.12	
6291.	3.43	2.42	0.0	0.0	1.16	1.16	1.11	
6323.	3.42	2.47	0.0	0.0	1.15	1.14	1.11	
6356.	3.41	2.51	0.0	0.0	1.15	1.14	1.10	
6445.	3.43	2.37	0.0	0.0	1.15	1.15	1.10	
6515.	3.40	2.34	0.0	0.0	1.15	1.14	1.11	
6579.	3.36	2.44	0.0	0.0	1.14	1.12	1.11	
		1.75						END OF CHARGE
6259.	4.53	1.38	0.0	0.0	1.53	1.50	1.48	
6291.	4.57	1.36	0.0	0.0	1.55	1.50	1.49	
6323.	4.57	1.31	0.0	0.0	1.54	1.50	1.49	
6356.	4.57	1.35	0.0	0.0	1.55	1.50	1.50	
6445.	4.53	1.09	0.0	0.0	1.53	1.49	1.48	
6515.	4.53	1.08	0.0	0.0	1.52	1.46	1.51	
6579.	4.52	1.05	0.0	0.02	1.55	1.49	1.49	

PACK NO. 90C DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6310.	5.80	2.78	1.18	1.16	1.16	1.17	1.14	
6342.	5.80	2.78	1.18	1.16	1.16	1.17	1.14	
6374.	5.79	2.79	1.17	1.16	1.16	1.17	1.13	
6406.	5.79	2.78	1.17	1.16	1.16	1.17	1.13	
6438.	5.80	2.80	1.17	1.16	1.16	1.17	1.13	
6471.	5.81	2.77	1.18	1.16	1.17	1.17	1.13	
6560.	5.79	2.79	1.17	1.16	1.16	1.16	1.13	
6581.	5.80	2.78	1.18	1.16	1.16	1.16	1.13	
6645.	6.03	2.85	1.23	1.21	1.22	1.22	1.19	
		1.61						END OF CHARGE
6310.	7.75	0.81	1.56	1.54	1.55	1.52	1.58	
6342.	7.74	0.80	1.55	1.54	1.55	1.52	1.58	
6374.	7.75	0.80	1.55	1.54	1.55	1.53	1.57	
6406.	7.76	0.78	1.55	1.54	1.55	1.53	1.57	
6438.	7.76	0.87	1.55	1.55	1.55	1.53	1.57	
6471.	7.75	0.81	1.55	1.54	1.55	1.53	1.57	
6560.	7.75	0.76	1.55	1.54	1.55	1.53	1.57	
6581.	7.76	0.83	1.54	1.53	1.54	1.50	1.60	
6645.	7.72	1.44	1.54	1.56	1.54	1.55	1.57	

CELL NO. 32B DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
6046.	5.49	2.74	1.12	1.11	1.12	1.12	1.04	
6078.	5.55	2.73	1.13	1.11	1.12	1.13	1.07	
6110.	5.52	2.75	1.12	1.11	1.12	1.12	1.05	
6143.	5.53	2.74	1.13	1.12	1.13	1.12	1.06	
6174.	5.52	2.74	1.12	1.12	1.13	1.13	1.06	
6206.	5.87	2.76	1.18	1.17	1.18	1.18	1.19	
6239.	5.87	2.75	1.18	1.17	1.18	1.18	1.19	
6349.	5.75	2.73	1.15	1.15	1.16	1.15	1.16	
6381.	5.75	2.73	1.15	1.15	1.16	1.15	1.16	
6413.	5.73	2.75	1.15	1.14	1.15	1.15	1.16	
		1.61						END OF CHARGE
6046.	7.50	0.84	1.50	1.52	1.51	1.50	1.49	
6078.	7.52	0.82	1.50	1.52	1.00	1.51	1.49	
6110.	7.51	0.84	1.50	1.52	1.51	1.50	1.49	
6143.	7.52	0.83	1.50	1.53	1.51	1.51	1.49	
6174.	7.51	0.84	1.50	1.53	1.51	1.51	1.50	
6206.	7.50	0.86	1.50	1.53	1.51	1.51	1.50	
6239.	7.33	1.57	1.47	1.49	1.48	1.47	1.46	
6349.	8.04	0.81	1.54	1.64	1.55	1.54	1.54	
6381.	7.90	0.81	1.56	1.66	1.58	1.57	1.57	
6413.	7.92	0.80	1.57	1.67	1.58	1.58	1.57	

PACK NO. 858 DEPTH OF DISCHARGE 25. TEST TEMPERATURE 40. C
YARDNEY 12 A.H. PERCENT OF RECHARGE 130 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE					
		6.00	1	2	3	4	5	END OF DISCHARGE
1939.	4.96	5.44	0.83	1.04	1.02	1.04	1.03	
1971.	4.00	5.40	0.83	1.04	1.01	1.03	1.02	
1978.	4.41	4.83	0.36	1.03	1.00	1.01	1.02	
		3.90						END OF CHARGE
1939.	7.66	1.51	1.54	1.54	1.53	1.53	1.50	
1971.	7.70	1.52	1.55	1.55	1.54	1.55	1.51	
1978.	7.67	1.51	0.0	1.54	1.54	1.54	1.52	

PACK NO. 978 DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
YARDNEY 12 A.H. PERCENT OF RECHARGE 130 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
3866.	3.18	2.63	0.0	0.0	1.06	1.06	1.05	
3898.	3.18	2.62	0.0	0.0	1.06	1.06	1.05	
3931.	3.20	2.68	0.0	0.0	1.07	1.08	1.04	
3962.	3.19	2.62	0.0	0.0	1.07	1.07	1.04	
3994.	3.19	2.59	0.0	0.0	1.06	1.07	1.05	
4026.	3.19	2.57	0.0	0.0	1.07	1.07	1.04	
4186.	3.18	2.58	0.0	0.0	1.06	1.06	1.04	
4218.	3.18	2.57	0.0	0.0	1.06	1.07	1.05	
4250.	3.19	2.57	0.0	0.0	1.07	1.07	1.04	
		3.90						END OF CHARGE
3866.	4.80	0.89	0.0	0.0	1.60	1.59	1.60	
3898.	4.80	0.88	0.0	0.0	1.61	1.59	1.59	
3931.	4.79	0.98	0.0	0.0	1.60	1.60	1.59	
3962.	4.81	0.87	0.0	0.0	1.60	1.60	1.59	
3994.	4.80	0.87	0.0	0.0	1.60	1.59	1.59	
4026.	4.80	0.83	0.0	0.0	1.60	1.59	1.58	
4186.	4.82	0.77	0.0	0.0	1.59	1.57	1.63	
4218.	4.83	0.77	0.0	0.0	1.59	1.57	1.63	
4250.	4.81	0.80	0.0	0.0	1.60	1.60	1.59	

PACK NO. 748 DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C

GULTON 1.25 A.H. PERCENT OF RECHARGE NA ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.63	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
4789.	5.66	0.62	1.17	1.16	1.15	1.14	1.05	
4823.	5.66	0.62	1.17	1.16	1.15	1.14	1.04	
4853.	5.61	0.62	1.16	1.16	1.15	1 13	1.03	
4884.	5.63	0.62	1.17	1.16	1.15	1.14	1.03	
4917.	5.77	0.62	1.18	1.00	1.18	1.16	1.09	
4949.	5.89	0.62	1.20	1.19	1.20	1.18	1.14	
5047.	5.71	0.62	1.17	1.16	1.16	1.15	1.10	
5076.	5.72	0.62	1.17	1.17	1.16	1.15	1.11	
5110.	5.69	0.62	1.16	1.16	1.15	1.14	1.08	
5174.	5.75	0.62	1.18	1.17	1.18	1.16	1.10	
		1.00						END OF CHARGE
4789.	8.88	1.00	1.77	1.75	1.74	1.80	1.83	
4823.	8.85	1.01	1.77	1.74	1.74	1.79	1.00	
4853.	8.85	1.01	1.76	1.74	1.74	1.79	1.82	
4884.	8.85	1.01	1.76	1.74	1.74	1.79	1.83	
4917.	8.53	1.01	1.71	1.69	1.69	1.72	1.75	
4949.	8.48	1.00	1.72	1.68	1.68	1.71	1.72	
5047.	8.86	1.01	1.76	1.77	1.76	1.78	1.83	
5076.	8.84	1.01	1.76	1.76	1.75	1.78	1.82	
5110.	8.93	1.01	1.73	1.74	1.72	1.75	1.78	
5174.	8.69	1.00	1.74	1.74	1.72	1.74	1.78	

PACK NO. 88D DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C
GULTON 1.25 A.H. PERCENT OF RECHARGE NA ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.63	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
4178.	4.49	0.62	1.16	1.11	1.15	1.09	0.0	
4212.	4.53	0.61	1.16	1.12	1.15	1.11	0.0	
4242.	4.48	0.61	1.15	1.12	1.15	1.09	0.0	
4273.	4.40	0.61	1.16	1.12	1.15	1.10	0.0	
4306.	4.64	0.62	1.18	1.16	1.16	1.16	0.0	
4338.	4.73	0.62	1.20	1.18	1.19	1.18	0.0	
4436.	4.42	0.63	1.16	1.02	1.16	1.08	0.0	
4465.	4.47	0.62	1.16	1.07	1.16	1.08	0.0	
4499.	4.45	0.63	1.15	1.09	1.15	1.07	0.0	
4563.	4.56	0.63	1.17	1.13	1.15	1.12	0.0	
		1.00						END OF CHARGE
4178.	7.40	1.00	1.83	1.82	1.85	1.90	0.0	
4212.	7.36	1.00	1.82	1.80	1.84	1.89	0.0	
4242.	7.35	1.00	1.82	1.81	1.84	1.89	0.0	
4273.	7.36	1.00	1.83	1.81	1.85	1.88	0.0	
4306.	6.89	1.00	1.71	1.72	1.72	1.74	0.0	
4338.	6.82	1.01	1.71	1.70	1.70	1.72	0.0	
4436.	7.38	1.01	1.82	1.87	1.80	1.89	0.0	
4465.	7.38	1.01	1.82	1.85	1.81	1.89	0.0	
4499.	7.31	1.01	1.80	1.80	1.79	1.84	0.0	
4563.	7.12	1.00	1.77	1.76	1.77	1.82	0.01	

PACK NO. 988 DEPTH OF DISCHARGE 60. TEST TEMPERATURE 0. C
GULTON 1.25 A.H. PERCENT OF RECHARGE NA ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
5097.	4.23	1.52	1.08	1.06	1.05	1.04	0.0	
5131.	4.26	1.47	1.08	1.08	1.07	1.05	0.0	
5161.	4.16	1.43	1.06	1.05	1.04	1.02	0.0	
5192.	4.21	1.51	1.07	1.07	1.06	1.04	0.0	
5225.	4.13	1.45	1.06	1.05	1.04	1.01	0.0	
5257.	4.19	1.50	1.06	1.07	1.06	1.03	0.0	
5355.	4.02	1.43	1.03	1.06	1.04	0.93	0.0	
5384.	3.95	1.45	1.01	1.05	1.02	0.90	0.0	
5418.	3.91	1.50	1.01	1.05	1.00	0.88	0.0	
5482.	4.03	1.45	1.06	1.07	1.07	0.85	0.0	
		1.25						END OF CHARGE
5097.	7.01	1.24	1.75	1.75	1.73	1.76	0.0	
5131.	7.13	1.25	1.78	1.78	1.77	1.78	0.0	
5161.	7.09	1.25	1.77	1.77	1.76	1.77	0.0	
5192.	7.05	1.25	1.76	1.76	1.75	1.77	0.0	
5225.	7.09	1.25	1.77	1.77	1.77	1.77	0.0	
5257.	7.07	1.24	1.77	1.77	1.76	1.77	0.0	
5355.	7.13	1.25	1.78	1.78	1.78	1.79	0.0	
5384.	7.11	1.25	1.78	1.77	1.77	1.78	0.0	
5418.	7.08	1.25	1.75	1.74	1.74	1.75	0.0	
5482.	6.75	1.25	1.67	1.67	1.68	1.71	0.0	

PACK NO. 1088 DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C

GULTON 1.25 A.H. PERCENT OF RECHARGE NA ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.63	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
5080.	6.04	0.61	1.21	1.21	1.21	1.20	1.22	
5114.	6.03	0.62	1.20	1.21	1.21	1.20	1.22	
5144.	6.01	0.62	1.20	1.21	1.20	1.19	1.22	
5175.	6.01	0.62	1.20	1.21	1.21	1.20	1.22	
5208.	6.01	0.62	1.20	1.21	1.21	1.20	1.22	
5240.	6.01	0.62	1.20	1.21	1.21	1.20	1.22	
5338.	6.00	0.62	1.20	1.21	1.21	1.20	1.22	
5367.	6.00	0.62	1.20	1.21	1.21	1.19	1.22	
5401.	6.02	0.62	1.19	1.20	1.20	1.19	1.21	
5465.	6.01	0.62	1.20	1.21	1.21	1.20	1.22	
		1.25						END OF CHARGE
5080.	8.62	1.25	1.68	1.73	1.76	1.75	1.70	
5114.	8.67	1.26	1.68	1.76	1.77	1.75	1.70	
5144.	8.64	1.26	1.68	1.74	1.77	1.75	1.70	
5175.	8.65	1.26	1.68	1.74	1.77	1.75	1.71	
5208.	8.63	1.25	1.68	1.74	1.77	1.75	1.71	
5240.	8.64	1.25	1.68	1.74	1.77	1.75	1.71	
5338.	8.64	1.26	1.68	1.75	1.77	1.75	1.71	
5367.	8.65	1.26	1.69	1.75	1.77	1.75	1.71	
5401.	8.76	1.25	1.66	1.74	1.75	1.73	1.68	
5465.	8.24	1.26	1.62	1.66	1.68	1.68	1.63	

PACK NO. 1B DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C

ESB. 8 A.H. 3RD ELECTRODE RES 2.0 2.0 2.0 2.0 2.0 RECHARGE PERIOD 8.0 HRS

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
430.	5.23	2.02	0.009	0.093	0.067	0.065	0.025	1.04	1.04	1.05	1.03	1.06	
454.	5.25	2.04	0.003	0.007	0.005	0.003	0.008	1.04	1.05	1.05	1.04	1.05	
478.	5.24	2.03	0.004	0.007	0.006	0.004	0.005	1.04	1.05	1.05	1.04	1.06	
		0.50											END OF CHARGE
430.	7.70	0.15	0.024	0.158	0.153	0.114	0.065	1.54	1.53	1.54	1.52	1.54	
454.	7.60	0.16	0.0	0.001	0.003	0.002	0.004	1.51	1.51	1.52	1.51	1.52	
478.	7.58	0.17	0.015	0.011	0.019	0.020	0.019	1.52	1.52	1.53	1.53	1.49	

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PACK NO. 2C — DEPTH OF DISCHARGE 1[illegible] — TEST TEMPERATURE 25. C

YARDNEY 3 A.H. FR-1 — PERCENT OF [illegible] CHARGE 2[illegible] — ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
2073.	9.71	1.00	1.09	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	0.0	
2105.	9.72	1.00	1.09	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	0.0	
2137.	9.71	1.00	1.08	1.09	1.09	1.08	1.08	1.08	1.08	1.08	1.08	0.0	
2168.	9.71	1.01	1.08	1.09	1.09	1.08	1.08	1.08	1.08	1.08	1.08	0.0	
2200.	9.69	1.01	1.08	1.09	1.09	1.08	1.09	1.08	1.08	1.08	1.08	0.0	
2233.	9.72	1.02	1.08	1.09	1.09	1.09	1.09	1.08	1.08	1.08	1.08	0.0	
2322.	9.72	1.02	1.08	1.09	1.09	1.09	1.09	1.08	1.08	1.08	1.08	0.0	
2392.	9.73	1.00	1.08	1.09	1.08	1.08	1.08	1.08	1.08	1.08	1.08	0.0	
2456.	9.72	1.00	1.09	1.09	1.09	1.09	1.09	1.08	1.08	1.08	1.08	0.0	
		1.30											END OF CHARGE
2073.	13.73	0.20	1.54	1.53	1.53	1.53	1.53	1.52	1.50	1.53	1.52	0.0	
2105.	13.72	0.20	1.53	1.54	1.54	1.52	1.53	1.53	1.50	1.53	1.52	0.0	
2137.	13.73	0.20	1.53	1.54	1.53	1.53	1.53	1.53	1.50	1.52	1.53	0.0	
2168.	13.71	0.19	1.53	1.54	1.53	1.51	1.53	1.53	1.50	1.52	1.53	0.0	
2200.	13.70	0.20	1.53	1.54	1.54	1.53	1.54	1.52	1.50	1.52	1.53	0.0	
2233.	13.82	0.19	1.54	1.55	1.54	1.54	1.53	1.54	1.52	1.53	1.54	0.0	
2322.	13.86	0.16	1.54	1.56	1.56	1.55	1.53	1.54	1.54	1.53	1.54	0.0	
2392.	13.83	0.19	1.51	1.54	1.53	1.51	1.51	1.51	1.49	1.49	1.51	0.0	
2456.	13.73	0.19	1.52	1.55	1.55	1.52	1.54	1.52	1.50	1.52	1.54	0.0	

PACK NO. 118 DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C

GULTON 6 A.H. 3RD ELECTRODE RES 6.2 6.2 6.2 6.2 6.2 OHMS PER LOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTROD				CELL VOLTAGE					END OF DISCHARGE AH OUT
		9.60	1	2	3	4	5	1	2	3	4	5	
1512.	5.65	9.60	0.081	0.057	0.081	0.066	0.062	1.14	1.13	1.12	1.13	1.14	
1549.	5.45	9.59	0.047	0.027	0.044	0.036	0.033	1.10	1.09	1.08	1.08	1.10	
1576.	5.46	9.63	0.051	0.025	0.048	0.039	0.031	1.10	1.09	1.08	1.08	1.10	
1608.	5.60	9.64	0.056	0.029	0.049	0.040	0.037	1.12	1.11	1.11	1.11	1.13	
1640.	5.55	9.63	0.061	0.029	0.051	0.044	0.036	1.11	1.10	1.10	1.11	1.00	
1673.	5.53	9.61	0.069	0.035	0.059	0.050	0.044	1.10	1.09	1.09	1.10	1.11	
1701.	5.44	9.58	0.061	0.029	0.054	0.045	0.038	1.08	1.08	1.08	1.09	1.10	
1800.	5.76	9.53	0.082	0.052	0.072	0.066	0.057	1.15	1.15	1.15	1.15	1.16	
1833.	5.64	9.52	0.075	0.045	0.070	0.056	0.055	1.12	1.12	1.13	1.12	1.14	
1897.	5.58	9.60	0.064	0.033	0.054	0.048	0.044	1.12	1.11	1.11	1.11	1.13	
		6.00											END OF CHARGE
1512.	7.26	2.53	0.097	0.113	0.124	0.059	0.080	1.45	1.45	1.45	1.44	1.45	
1549.	7.28	3.20	0.065	0.071	0.078	0.041	0.053	1.45	1.45	1.45	1.45	1.46	
1576.	7.29	3.14	0.071	0.071	0.083	0.043	0.053	1.45	1.45	1.45	1.45	1.46	
1608.	7.29	3.24	0.070	0.075	0.079	0.038	0.049	1.45	1.45	1.45	1.45	1.46	
1640.	7.24	3.35	0.093	0.092	0.098	0.048	0.057	1.44	1.44	1.44	1.44	1.45	
1673.	7.20	2.62	0.103	0.105	0.115	0.053	0.069	1.43	1.44	1.43	1.43	1.44	
1701.	7.19	2.33	0.103	0.100	0.108	0.054	0.064	1.43	1.43	1.44	1.43	1.44	
1800.	7.26	2.19	0.117	0.112	0.120	0.060	0.071	1.44	1.45	1.45	1.44	1.45	
1833.	7.24	1.89	0.144	0.139	0.155	0.086	0.105	1.46	1.46	1.46	1.46	1.42	
1897.	7.30	3.13	0.101	0.095	0.100	0.052	0.064	1.45	1.46	1.46	1.45	1.46	

PACK NO. 45B
YARDNEY 11 A.H.

DEPTH OF DISCHARGE 40.
PERCENT OF RECHARGE NA

TEST TEMPERATURE 0. C
ORBIT PERIOD 24.0 HRS. NA

CYCLE NO.	PACK VOLTAGE	CURRENT 4.40	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
87.	10.10	4.37	1.02	1.02	1.01	1.01	1.00	0.99	1.02	1.03	1.02	0.99	
95.	10.11	4.39	1.02	1.02	1.01	1.02	1.00	0.99	1.02	1.03	1.02	1.00	
103.	9.74	4.39	1.00	1.00	0.97	0.98	0.92	0.90	1.01	1.02	1.00	0.98	
111.	10.12	4.33	1.02	1.03	1.01	1.02	1.00	0.99	1.02	1.03	1.03	1.00	
		0.30											END OF CHARGE
87.	15.22	0.09	1.54	1.51	1.53	1.52	1.53	1.52	1.52	1.51	1.50	1.50	
95.	15.20	0.08	1.54	1.51	1.53	1.52	1.55	1.52	1.52	1.50	1.50	1.50	
103.	15.24	0.10	1.54	1.52	1.54	1.53	1.54	1.53	1.52	1.50	1.50	1.51	
111.	15.24	0.07	1.54	1.52	1.55	1.53	1.55	1.54	1.52	1.50	1.50	1.49	

PACK NO. 18C
GULTON 6 A.H. COULOMETER
DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C
PERCENT OF RECHARGE NA ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
592.	5.48	2.93	0.13	1.12	1.12	1.12	1.13	1.13	5.59	0.0	0.0	0.0	
624.	5.33	2.85	0.16	1.10	1.10	1.09	1.10	1.11	5.45	0.0	0.0	0.0	
656.	5.37	2.89	0.14	1.11	1.11	1.10	1.11	1.12	5.49	0.0	0.0	0.0	
688.	5.32	2.87	0.15	1.10	1.10	1.09	1.11	1.11	5.46	0.0	0.0	0.0	
720.	5.46	2.92	0.13	1.13	1.12	1.12	1.13	0.01	5.56	0.0	0.0	0.0	
752.	5.50	2.97	0.13	1.13	1.14	1.13	1.13	1.14	5.60	0.0	0.0	0.0	
784.	5.46	2.97	0.1	1.13	1.13	1.12	1.13	1.13	5.56	0.0	0.0	0.0	
		3.00											END OF CHARGE
592.	8.00	0.18	1.07	1.39	1.38	1.39	1.38	1.38	6.89	0.0	0.0	0.0	
624.	8.01	0.18	1.08	1.39	1.39	1.39	1.39	1.38	6.89	0.0	0.0	0.0	
656.	7.99	0.18	1.06	1.39	1.39	1.39	1.39	1.38	6.88	0.0	0.0	0.0	
688.	7.95	0.17	1.01	1.39	1.39	1.39	1.39	1.39	6.89	0.0	0.0	0.0	
720.	8.04	0.18	1.10	1.40	1.40	1.39	1.40	0.01	6.90	0.0	0.0	0.0	
752.	8.00	0.17	1.05	1.40	1.39	1.39	1.39	1.39	6.90	0.0	0.0	0.0	
784.	8.00	0.17	1.06	1.40	1.40	1.39	1.39	1.38	6.90	0.0	0.0	0.0	

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IJT2231

PACK NO. 29B — DEPTH OF DISCHARGE 25. — TEST TEMPERATURE 40. C

GULTON 6 A.H. COULOMETER — PERCENT OF RECHARGE NA — ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	COULOMETER CURRENT	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
566.	4.94	2.96	0.14	1.01	1.01	1.01	1.04	1.02	5.05	0.0	0.0	0.0	
598.	4.53	2.85	0.16	0.94	0.94	0.91	0.97	0.94	4.67	0.0	0.0	0.0	
630.	4.86	2.96	0.14	1.00	1.01	0.99	1.03	1.01	4.99	0.0	0.0	0.0	
662.	4.51	2.78	0.16	0.94	0.94	0.89	0.98	0.95	4.65	0.0	0.0	0.0	
694.	5.03	3.00	0.14	1.03	1.05	1.03	1.05	1.04	5.14	0.0	0.0	0.0	
726.	5.08	2.99	0.13	1.04	1.07	1.04	1.06	1.05	5.18	0.0	0.0	0.0	
758.	5.03	2.99	0.13	1.03	1.06	1.02	1.05	1.04	5.14	0.0	0.0	0.0	
		3.00											END OF CHARGE
566.	7.78	0.24	0.93	1.37	1.37	1.37	1.36	1.37	6.80	0.0	0.0	0.0	
598.	7.79	0.25	0.95	1.37	1.37	1.37	1.37	1.37	6.80	0.0	0.0	0.0	
630.	7.76	0.24	0.93	1.37	1.37	1.37	1.37	1.37	6.79	0.0	0.0	0.0	
662.	7.73	0.23	0.90	1.37	1.37	1.37	1.37	1.37	6.80	0.0	0.0	0.0	
694.	7.80	0.25	0.96	1.38	1.38	1.37	1.38	1.37	6.80	0.0	0.0	0.0	
726.	7.77	0.23	0.92	1.38	1.38	1.38	1.37	1.37	6.81	0.0	0.0	0.0	
758.	7.77	0.24	0.93	1.38	1.38	1.38	1.38	1.37	6.81	0.0	0.0	0.0	

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PACK NO. 41B DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C
GULTON-6 A.H. COULOMETER PERCENT OF RECHARGE NA ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
570.	5.75	2.95	0.23	1.20	1.20	1.20	1.20	1.19	5.96	0.0	0.0	0.0	
602.	5.66	2.94	0.30	1.20	1.20	1.20	1.20	1.19	5.94	0.0	0.0	0.0	
634.	5.99	2.98	0.10	1.22	1.22	1.23	1.22	1.22	6.06	0.0	0.0	0.0	
666.	4.45	2.22	1.55	1.21	1.21	1.21	1.21	1.20	5.88	0.0	0.0	0.0	
698.	4.43	2.21	1.60	1.22	1.22	1.22	1.21	1.21	6.01	0.0	0.0	0.0	
721.	5.01	3.00	0.84	1.18	1.18	1.18	1.18	1.16	5.83	0.0	0.0	0.0	
753.	5.67	3.04	0.28	1.20	1.20	1.19	1.20	1.19	5.93	0.0	0.0	0.0	
		3.00											END OF CHARGE
570.	8.52	0.16	0.98	1.51	1.51	1.50	1.50	1.51	7.50	0.0	0.0	0.0	
602.	8.53	0.16	0.99	1.51	1.52	1.50	1.51	1.51	7.50	0.0	0.0	0.0	
634.	8.51	0.22	1.16	1.47	1.47	1.47	1.47	1.47	7.31	0.0	0.0	0.0	
666.	8.49	0.16	0.95	1.51	1.52	1.50	1.50	1.52	7.49	0.0	0.0	0.0	
698.	8.55	0.17	1.00	1.51	1.52	1.51	1.51	1.52	7.50	0.0	0.0	0.0	
721.	8.47	0.13	1.32	1.00	1.45	1.44	1.44	1.40	7.11	0.0	0.0	0.0	
753.	8.52	0.15	0.98	1.51	1.52	1.51	1.51	1.52	7.50	0.0	0.0	0.0	

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PACK NO. 66B DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C

GULTON 6 A.H. COULOMETER PERCENT OF RECHARGE NA ORBIT PERIOD 3.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
629.	5.90	3.02	0.15	1.21	1.21	1.21	1.21	1.21	6.02	0.0	0.0	0.0	
661.	5.28	2.66	0.77	1.22	1.22	1.22	1.22	1.21	6.03	0.0	0.0	0.0	
693.	4.68	2.29	1.40	1.23	1.22	1.22	1.23	1.22	6.05	0.0	0.0	0.0	
725.	4.64	2.27	1.44	1.23	1.23	1.22	1.23	1.22	6.05	0.0	0.0	0.0	
		3.00											END OF CHARGE
629.	8.26	0.20	0.97	1.46	1.46	1.45	1.45	1.46	7.24	0.0	0.0	0.0	
661.	8.24	0.20	0.95	1.47	1.46	1.46	1.45	1.46	7.24	0.0	0.0	0.0	
693.	8.24	0.19	0.95	1.47	1.46	1.46	1.46	1.46	7.25	0.0	0.0	0.0	
725.	8.26	0.20	0.97	1.47	1.47	1.46	1.46	1.46	7.25	0.0	0.0	0.0	

PACK NO. 57C — DEPTH OF DISCHARGE 31. — TEST TEMPERATURE 25. C
YARDNEY 16 A.H. — PERCENT OF RECHARGE 230 — ORBIT PERIOD 24.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 5.00	CELL VOLTAGE 1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
52.	14.69	4.97	1.29	1.50	1.50	1.50	1.50	1.51	1.50	1.50	1.50	1.34	
60.	14.67	5.01	1.29	1.51	1.51	1.50	1.50	1.50	1.50	1.50	1.50	1.34	
68.	14.61	4.99	1.28	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.33	
76.	14.61	4.96	1.29	1.51	1.51	1.50	1.50	1.50	1.50	1.49	1.50	1.33	
		0.50											END OF CHARGE
52.	18.73	0.01	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	
60.	18.71	0.01	1.87	1.88	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	
68.	18.72	0.01	1.87	1.88	1.87	1.88	1.87	1.87	1.87	1.86	1.86	1.86	
76.	18.72	0.01	1.87	1.88	1.88	1.87	1.87	0.0	1.86	1.86	1.87	1.86	

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PACK NO. 73C DEPTH OF DISCHARGE 40. TEST TEMPERATURE 25. C

GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 125 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
633.	5.65	2.77	1.09	1.16	1.16	1.16	1.08	
665.	5.64	2.80	1.09	1.16	1.16	1.16	1.08	
697.	5.63	2.81	1.08	1.16	1.17	1.16	1.08	
729.	5.62	2.79	1.08	1.16	1.16	1.16	1.08	
761.	5.62	2.79	1.08	1.16	1.17	1.16	1.08	
794.	5.61	2.79	1.08	1.16	1.16	1.16	1.08	
883.	5.59	2.80	1.08	1.16	1.16	1.16	1.07	
953.	5.61	2.78	1.08	1.16	1.16	1.16	1.07	
1017.	5.61	2.78	1.08	1.15	1.16	1.16	1.06	
		1.75						END OF CHARGE
633.	7.47	0.93	1.52	1.47	1.48	1.49	1.51	
665.	7.46	0.91	1.51	1.48	1.49	1.49	1.50	
697.	7.47	0.97	1.51	1.48	1.49	1.49	1.51	
729.	7.46	0.93	1.51	1.48	1.49	1.49	1.51	
761.	7.45	1.23	1.52	1.48	1.49	1.48	1.52	
794.	7.45	1.25	1.52	1.47	1.49	1.48	1.51	
883.	7.47	1.32	1.52	1.48	1.49	1.49	1.52	
953.	7.59	0.94	1.50	1.47	1.47	1.47	1.48	
1017.	7.47	0.94	1.51	1.48	1.49	1.50	1.49	

PACK NO. 87C DEPTH OF DISCHARGE 25. TEST TEMPERATURE 25. C
GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 125 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	CELL VOLTAGE 1	2	3	4	5	END OF DISCHA
633.	5.85	1.73	1.13	1.20	1.20	1.17	1.15	
665.	5.85	1.74	1.13	1.20	1.20	1.18	1.15	
697.	1.18	1.76	1.19	1.00	0.0	1.14	1.18	
729.	5.85	1.75	1.13	1.20	1.20	1.20	1.13	
761.	5.85	1.75	1.13	1.20	1.20	1.20	1.13	
794.	5.85	1.75	1.13	1.20	1.20	1.20	1.12	
883.	5.84	1.76	1.12	1.19	1.19	1.20	1.12	
953.	5.83	1.74	1.12	1.19	1.19	1.19	1.13	
1017.	5.83	1.73	1.13	1.20	1.20	1.20	1.13	
		1.09						END OF CHARGE
633.	7.50	0.89	1.52	1.49	1.49	1.51	1.48	
665.	7.49	0.90	1.52	1.49	1.49	1.51	1.48	
697.	7.50	0.95	1.52	1.49	1.49	1.49	1.50	
729.	7.50	0.91	1.52	1.49	1.49	1.49	1.50	
761.	7.49	1.04	1.52	1.49	1.48	1.48	1.51	
794.	7.49	1.04	1.52	1.49	1.48	1.49	1.50	
883.	7.51	1.08	1.53	1.49	1.48	1.49	1.51	
953.	7.51	0.88	1.50	1.47	1.47	1.46	1.54	
1017.	7.51	0.89	1.52	1.50	1.50	1.49	1.52	

PACK NO. 75D DEPTH OF DISCHARGE 40. TEST TEMPERATURE -20. C

GULTON 5 A.H. PLITT SEAL PERCENT OF RECHARGE 110 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
611.	5.68	2.75	1.15	1.12	1.14	1.15	1.13	
643.	5.68	2.75	1.14	1.12	1.14	1.15	1.13	
676.	5.70	2.76	1.15	1.13	1.15	1.15	1.15	
707.	5.68	2.75	1.15	1.12	1.14	1.15	1.14	
739.	5.96	2.77	1.20	1.19	1.20	1.20	1.20	
771.	6.03	2.77	1.22	1.20	1.21	1.21	1.21	
931.	5.69	2.75	1.14	1.13	1.14	1.14	1.14	
963.	5.70	2.75	1.15	1.12	1.13	1.14	1.13	
995.	5.65	2.75	1.14	1.13	1.14	1.14	1.14	
		1.54						END OF CHARGE
611.	7.89	0.74	1.58	1.58	1.59	1.58	1.55	
643.	7.90	0.74	1.58	1.58	1.59	1.58	1.56	
676.	7.90	0.74	1.58	1.58	1.59	1.58	1.58	
707.	7.89	0.75	1.58	1.58	1.59	1.58	1.58	
739.	7.82	1.21	1.57	1.57	1.58	1.56	1.57	
771.	7.28	1.68	1.46	1.46	1.46	1.46	1.45	
931.	8.03	0.68	1.57	1.57	1.57	1.56	1.55	
963.	7.90	0.72	1.57	1.56	1.57	1.55	1.60	
995.	7.91	0.73	1.59	1.59	1.60	1.58	1.58	

PACK NO. 89C DEPTH OF DISCHARGE 25. TEST TEMPERATURE -20. C
GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 110 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
584.	5.82	1.75	1.18	1.16	1.15	1.17	1.15	
616.	5.82	1.76	1.18	1.17	1.16	1.17	1.16	
648.	5.84	1.77	1.18	1.17	1.16	1.18	1.15	
680.	5.83	1.75	1.18	1.17	1.16	1.18	1.15	
922.	6.12	1.77	1.22	1.23	1.22	1.22	1.22	
954.	6.24	1.77	1.25	1.25	1.25	1.24	1.24	
986.	5.80	1.75	1.17	1.16	1.15	1.16	1.15	
1018.	5.84	1.75	1.17	1.17	1.16	1.16	1.16	
1050.	5.78	1.75	1.16	1.16	1.15	1.17	1.14	
		1.61						END OF CHARGE
584.	7.87	0.52	1.58	1.58	1.56	1.58	1.55	
616.	7.87	0.54	1.58	1.58	1.56	1.58	1.55	
648.	7.87	0.53	1.58	1.58	1.56	1.59	1.54	
680.	7.86	0.53	1.58	1.58	1.56	1.59	1.55	
922.	7.83	0.91	1.57	1.57	1.56	1.57	1.54	
954.	7.37	1.04	1.48	1.48	1.47	1.48	1.45	
986.	7.87	0.46	1.56	1.57	1.54	1.56	1.58	
1018.	8.06	0.50	1.56	1.57	1.54	1.56	1.53	
1050.	7.88	0.49	1.58	1.58	1.56	1.59	1.54	

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PACK NO. 99C DEPTH OF DISCHARGE 40. TEST TEMPERATURE 0. C
GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.80	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
61[illegible]	5.83	2.78	1.[illegible]	1.17	1.17	1.17	1.15	
64[illegible]	5.82	2.80	1.17	1.17	1.17	1.17	1.15	
678.	5.87	2.79	1.17	1.17	1.17	1.17	1.17	
710.	5.90	2.73	1.17	1.17	1.18	1.17	1.18	
742.	5.87	2.76	1.17	1.17	1.17	1.[illegible]	1.18	
775.	5.86	2.79	1.17	1.17	1.17	[illegible]	1.17	
8[illegible]4.	5.88	2.79	1.17	1.17	1.17	[illegible]	1.18	
934.	5.88	2.82	1.16	1.16	1.16	1.16	1.16	
998.	5.81	2.78	1.16	1.16	1.16	1.17	1.15	

		1.61						END OF CHARGE
614.	7.76	0.70	1.54	1.56	1.56	1.56	1.54	
646.	7.77	0.72	1.54	1.56	1.56	1.56	1.54	
678.	7.77	0.72	1.54	1.57	1.56	1.56	1.56	
710.	7.76	0.70	1.54	1.56	1.56	1.56	1.55	
742.	7.76	0.70	1.55	1.57	1.56	1.56	1.56	
775.	7.77	0.71	1.54	1.57	1.56	1.56	1.56	
864.	7.78	0.73	1.55	1.57	1.57	1.56	1.56	
934.	7.88	0.73	1.53	1.55	1.54	1.53	1.52	
998.	7.77	0.74	1.54	1.56	1.56	1.56	1.54	

PACK NO. 122C DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 115 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
610.	5.98	1.77	1.20	1.19	1.19	1.	1.20	
644.	5.98	1.77	1.20	1.19	1.19	1.	1.20	
674.	5.95	1.78	1.19	1.19	1.19	1.	1.20	
705.	5.96	1.77	1.19	1.19	1.19	1.20	1.20	
738.	5.96	1.77	1.19	1.19	1.20	1.20	1.20	
770.	5.97	1.77	1.19	1.19	1.20	1.20	1.20	
868.	5.9	1.78	1.19	1.20	1.20	1.20	1.20	
897.	5.	1.77	1.19	1.20	1.20	1.20	1.20	
931.	5.9	1.76	1.19	1.18	1.19	1.00	1.19	
995.	5.97	1.76	1.19	1.20	1.20	1.20	1.20	
		1.01						END OF CHARGE
610.	7.77	0.71	1.57	1.56	1.55	1.56	1.54	
644.	7.78	0.72	1.56	1.56	1.55	1.56	1.54	
674.	7.78	0.74	1.57	1.56	1.55	1.56	1.54	
705.	7.77	0.71	1.56	1.56	1.55	1.56	1.54	
738.	7.77	0.70	1.56	1.57	1.55	1.56	1.55	
770.	7.78	0.71	1.56	1.56	1.55	1.56	1.55	
868.	7.79	0.72	1.57	1.57	1.56	1.56	1.55	
897.	7.79	0.72	1.57	1.57	1.56	1.57	1.55	
931.	7.78	0.71	1.55	1.55	1.53	1.53	1.56	
995.	7.75	0.88	1.60	1.00	1.55	1.55	1.54	

PACK NO. 112C DEPTH OF DISCHARGE 25. TEST TEMPERATURE 40. C

GULTON 3.5 A.H. PLITT SEAL PERCENT OF RECHARGE 160. ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
467.	5.75	1.75	1.08	1.16	1.18	1.17	1.15	
501.	5.76	1.73	1.08	1.16	1.19	1.18	1.15	
531.	5.70	1.74	1.07	1.15	1.18	1.17	1.15	
562.	6.00	1.78	1.25	1.32	1.33	1.33	1.31	
595.	5.72	1.74	1.07	1.15	1.18	1.17	1.15	
627.	5.75	1.73	1.09	1.16	1.18	1.18	1.16	
725.	5.70	1.75	1.07	1.15	1.17	1.17	1.14	
754.	5.73	1.72	1.07	1.15	1.18	1.17	1.15	
788.	5.66	1.75	1.04	1.13	1.17	1.15	1.15	
852.	5.73	1.67	1.07	1.15	1.18	1.18	1.15	
		1.40						END OF CHARGE
467.	7.29	1.39	1.50	1.45	1.45	1.45	1.43	
501.	7.30	1.39	1.50	1.45	1.45	1.46	1.42	
531.	7.29	1.40	1.50	1.45	1.45	1.45	1.43	
562.	7.29	1.37	1.50	1.45	1.45	1.46	1.43	
595.	7.30	1.36	1.50	1.45	1.45	1.45	1.43	
627.	7.30	1.40	1.50	1.45	1.45	1.45	1.43	
725.	7.31	1.43	1.51	1.45	1.45	1.44	1.44	
754.	7.31	1.35	1.50	1.45	1.45	1.45	1.43	
788.	7.45	1.38	1.49	1.44	1.43	1.43	1.42	
852.	7.31	1.37	1.51	1.46	1.45	1.45	1.43	

PACK NO. 478 DEPTH OF DISCHARGE 25. TEST TEMPERATURE 40. C

GULTON 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE	PACK VOLTAGE	CURRENT	THIRD ELECTRODE				CELL VOLTAGE					END OF DISCHARGE AH OUT
		6.00	1	2	3	4	5	1	2	3	4	5	
421.	2.29	5.96	0.158	0.174	0.804	0.00	0.038	1.15	1.15	1.	0.03	1.15	
458.	5.75	5.89	0.031	0.026	0.037	0.053	0.042	1.14	1.14	1.	1.15	1.17	
485.	5.71	5.92	0.030	0.022	0.034	0.051	0.035	1.13	1.13	1.	1.14	1.17	
517.	5.78	5.92	0.028	0.019	0.034	0.048	0.034	1.14	1.14	1.	1.15	1.18	
549.	5.78	5.91	0.031	0.019	0.030	0.047	0.029	1.15	1.14	1.	1.15	1.18	
582.	5.72	5.88	0.028	0.019	0.029	0.045	0.030	1.13	1.13	1.13	1.14	1.17	
610.	5.65	5.88	0.028	0.017	0.027	0.047	0.028	1.12	1.11	1.12	1.13	1.16	
709.	5.70	5.96	0.028	0.015	0.029	0.043	0.021	1.13	1.13	1.13	1.13	1.16	
742.	6.00	6.05	0.075	0.057	0.071	0.088	0.068	1.25	1.25	1.25	1.25	1.26	
806.	5.68	5.92	0.028	0.012	0.027	0.041	0.024	1.13	1.12	1.12	1.12	1.16	
													END OF CHARGE
		6.00											
421.	6.93	1.39	0.161	0.143	0.159	0.161	0.168	1.38	1.38	1.38	1.38	1.39	
458.	6.95	1.57	0.174	0.149	0.163	0.173	0.176	1.38	1.39	1.39	1.38	1.39	
485.	6.95	1.51	0.173	0.144	0.159	0.167	0.169	1.38	1.38	1.38	1.38	1.39	
517.	6.94	1.39	0.168	0.138	0.151	0.158	0.165	1.38	1.38	1.38	1.38	1.39	
549.	6.95	1.40	0.168	0.139	0.153	0.159	0.166	1.38	1.38	1.39	1.38	1.39	
582.	6.95	1.42	0.171	0.138	0.149	0.154	0.161	1.38	1.38	1.38	1.38	1.39	
610.	6.95	1.42	0.168	0.133	0.141	0.156	0.155	1.38	1.38	1.39	1.38	1.39	
709.	6.95	1.36	0.168	0.138	0.136	0.148	0.153	0.0	1.39	1.39	1.39	1.39	
742.	6.95	1.34	0.177	0.147	0.154	0.165	0.178	1.39	1.40	1.40	1.40	1.36	
806.	6.94	1.29	0.163	0.132	0.136	0.145	0.157	1.38	1.39	1.39	1.38	1.39	

PACK NO. 718 DEPTH OF DISCHARGE 40. TEST TEMPERATURE 0. C

GULTON 12 A.H. 3RD ELECTRODE RES. 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
402.	5.93	9.68	0.009	0.027	0.165	0.004	0.121	1.18	1.18	1.19	1.18	1.19	
439.	5.89	9.67	0.008	0.018	0.145	0.003	0.105	1.17	1.17	1.18	1.17	1.19	
466.	5.90	9.65	0.008	0.019	0.139	0.005	0.105	1.17	1.17	1.18	1.17	1.19	
530.	5.92	9.63	0.007	0.019	0.131	0.005	0.097	1.18	1.17	1.18	1.18	1.19	
563.	5.90	9.66	0.008	0.019	0.130	0.009	0.097	1.17	1.17	1.18	1.18	1.18	
591.	6.45	9.63	0.009	0.134	0.131	0.006	0.093	1.28	1.28	1.29	1.29	1.29	
690.	5.90	9.57	0.008	0.018	0.121	0.009	0.088	1.18	1.17	1.18	1.18	1.19	
723.	5.89	9.51	0.009	0.015	0.119	0.012	0.088	1.17	1.17	1.18	1.17	1.19	
787.	5.90	9.60	0.011	0.016	0.107	0.012	0.084	1.17	1.17	1.18	1.17	1.19	
		6.00											END OF CHARGE
402.	7.94	2.48	0.0	0.233	0.108	0.005	0.087	1.55	1.69	1.56	1.55	1.57	
439.	7.95	2.46	0.0	0.215	0.099	0.006	0.079	1.55	1.70	1.56	1.55	1.56	
466.	7.95	2.47	0.002	0.216	0.091	0.004	0.077	1.55	1.69	1.56	1.55	1.56	
530.	7.95	2.49	0.002	0.204	0.084	0.001	0.068	1.55	1.69	1.56	1.55	1.56	
563.	7.95	2.48	0.003	0.211	0.085	0.0	0.068	1.55	1.69	1.56	1.55	1.56	
591.	7.81	1.56	0.002	0.201	0.195	0.004	0.131	1.53	1.67	1.54	1.52	1.54	
690.	7.96	2.34	0.0	0.206	0.073	0.0	0.060	1.55	1.70	1.57	1.55	1.56	
723.	7.96	2.31	0.014	0.221	0.093	0.018	0.084	1.56	1.71	1.58	1.57	1.54	
787.	7.95	2.33	0.001	0.196	0.073	0.002	0.059	1.55	1.70	1.56	1.55	1.57	

PACK NO. 77B DEPTH OF DISCHARGE 20. TEST TEMPERATURE 25. C
Y ONLY 5.0 A.H. AGCD PERCENT OF RECHARGE NA ORBIT PERIOD 24.0 HRS.

SAMPLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
21.	5.37	1.00	1.10	1.09	1.09	1.09	1.08	
29.	5.36	0.99	1.09	1.09	1.08	1.10	1.08	
37.	5.36	1.00	1.09	1.09	1.08	1.09	1.08	
45.	5.36	1.02	1.09	1.09	0.90	1.09	1.07	
		0.30						END OF CHARGE
21.	7.56	0.01	1.53	1.47	1.49	1.52	1.49	
29.	7.53	0.0	1.51	1.48	1.47	1.50	1.48	
37.	7.59	0.01	1.68	1.49	1.18	1.70	1.52	
45.	7.56	0.0	1.82	1.43	1.18	1.61	1.52	

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PACK NO. 113B
YARDNEY 5.0 A.H. AGCD
DEPTH OF DISCHARGE 20.
PERCENT OF RECHARGE NA
TEST TEMPERATURE 0. C
ORBIT PERIOD 24.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
10.	6.11	1.00	1.09	1.10	1.09	1.09	1.08	
34.	5.42	0.97	1.09	1.09	1.09	1.10	1.07	
		0.30						END OF
10.	7.58	0.0	1.54	1.54	1.47	1.51	1.51	CHARGE
34.	7.44	0.01	1.46	1.48	1.75	1.49	1.11	

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PACK NO. 114B
YARDNEY 5.0 A.H. AGCD
DEPTH OF DISCHARGE 20.
PERCENT OF RECHARGE NA
TEST TEMPERATURE 0. C
ORBIT PERIOD 8.0 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE
39.	5.36	0.98	1.09	1.09	1.09	1.09	1.08	
63.	5.16	0.97	1.09	1.09	1.08	1.09	1.07	
87.	5.38	0.96	1.09	1.09	1.09	1.09	1.07	
		0.30						
39.	7.34	0.	1.50	1.51	1.51	1.51	1.49	END OF CHARGE
63.	7.39	0.05	1.50	1.51	1.50	1.51	1.49	
87.	7.49	0.05	1.49	1.49	1.49	1.48	1.52	

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PACK NO. 24B DEPTH OF DISCHARGE 40. TEST TEMPERATURE 25. C

G.E. 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 9.60	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
38.	6.03	9.55	0.574	0.605	0.595	0.424	0.565	1.21	1.21	1.20	1.20	1.21	
54.	5.63	9.43	0.124	0.323	0.209	0.167	0.335	1.16	1.16	1.16	1.15	0.98	
78.	5.49	8.95	0.318	0.511	0.451	0.328	0.279	1.16	1.16	1.16	1.14	0.96	
110.	5.39	8.84	0.327	0.508	0.442	0.298	0.237	1.15	1.16	1.15	1.12	0.79	
143.	5.31	8.60	0.287	0.476	0.392	0.242	0.191	1.15	1.15	1.15	1.10	0.73	
		6.00											END OF CHARGE
38.	7.21	5.42	0.813	0.821	0.815	0.680	0.843	1.45	1.45	1.44	1.43	1.43	
54.	7.26	5.44	0.804	0.809	0.797	0.635	0.816	1.45	1.46	1.45	1.44	1.44	
78.	7.31	5.47	0.817	0.822	0.802	0.644	0.818	1.47	1.47	1.46	1.44	1.45	
110.	7.32	5.47	0.816	0.826	0.807	0.637	0.819	1.47	1.48	1.46	1.45	1.45	
143.	7.38	6.00	0.819	0.830	0.810	0.641	0.817	1.48	1.49	1.47	1.46	1.45	

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PACK NO. 58A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 0. C
G.E. 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
105.	6.07	5.96	0.060	0.007	0.004	0.005	0.0	1.21	1.21	1.21	1.21	1.22	
136.	6.23	5.88	0.062	0.042	0.050	0.034	0.036	1.24	1.24	1.24	1.24	1.25	
139.	6.17	5.88	0.059	0.024	0.038	0.006	0.059	1.23	1.23	1.23	1.22	1.24	
152.	6.13	5.90	0.063	0.015	0.048	0.001	0.039	1.22	1.22	1.22	1.22	1.23	
169.	6.12	5.86	0.061	0.014	0.052	0.0	0.029	1.22	1.22	1.22	1.22	1.23	
200.	6.11	5.99	0.061	0.015	0.057	0.019	0.007	1.21	1.22	1.22	1.21	1.22	
233.	6.09	5.99	0.062	0.009	0.061	0.015	0.015	1.21	1.21	1.22	1.21	1.22	
		6.00											END OF CHARGE
105.	7.69	0.58	0.092	0.464	0.280	0.434	0.479	1.61	1.49	1.58	1.50	1.50	
136.	8.39	3.21	0.070	0.799	0.098	0.256	0.252	1.62	1.70	1.62	1.72	1.71	
139.	8.67	3.25	0.153	0.822	0.205	0.822	0.864	1.74	1.72	1.74	1.72	1.73	
152.	8.67	3.23	0.152	0.791	0.183	0.637	0.578	1.74	1.71	1.75	1.72	1.72	
169.	8.70	3.25	0.151	0.808	0.171	0.360	0.361	1.74	1.72	1.75	1.73	1.73	
200.	8.69	3.25	0.149	0.788	0.164	0.291	0.334	1.73	1.72	1.74	1.73	1.73	
233.	8.64	3.25	0.144	0.739	0.156	0.293	0.329	1.72	1.71	1.73	1.72	1.71	

PACK NO. 72A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 40. C

G.E. 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	THIRD ELECTRODE 1	2	3	4	5	CELL VOLTAGE 1	2	3	4	5	END OF DISCHARGE AH OUT
177.	6.08	9.63	0.081	0.090	0.071	0.072	0.072	1.21	1.21	1.21	1.21	1.22	
193.	5.98	9.56	0.069	0.094	0.074	0.077	0.076	1.19	1.19	1.19	1.19	1.20	
217.	5.96	9.55	0.073	0.093	0.080	0.076	0.080	1.19	1.18	1.19	1.18	1.20	
249.	5.93	9.50	0.074	0.093	0.080	0.081	0.080	1.18	1.18	1.18	1.18	1.19	
282.	5.92	9.50	0.075	0.103	0.082	0.081	0.085	1.1	1.18	1.18	1.18	1.18	
		6.00											END OF CHARGE
177.	8.09	5.07	0.070	0.053	0.069	0.062	0.080	1.59	1.61	1.61	1.61	1.63	
193.	8.84	4.89	0.218	0.188	0.190	0.183	0.196	1.74	1.76	1.77	1.76	1.78	
217.	8.90	5.00	0.229	0.187	0.201	0.188	0.199	1.76	1.77	1.78	1.77	1.79	
249.	8.92	5.00	0.231	0.191	0.203	0.188	0.204	1.76	1.77	1.78	1.77	1.79	
282.	8.98	5.7	0.235	0.198	0.220	0.199	0.215	1.77	1.79	1.79	1.78	1.80	

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PACK NO. 34A DEPTH OF DISCHARGE 40. TEST TEMPERATURE 40. C

G.E. 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTRODE					CELL VOLTAGE					END OF DISCHARGE AH OUT
		9.0	1	2	3	4	5	1	2	3	4	5	
13.	2.52	4.99	0.114	0.014	0.088	0.039	0.599	0.35	0.25	0.48	0.30	1.14	
28.	2.26	4.24	0.858	0.088	0.138	0.121	0.563	0.14	0.39	0.51	0.40	1.09	
		6.00											END OF CHARGE
13.	7.14	5.81	0.022	0.807	0.841	0.835	0.857	1.42	1.42	1.43	1.41	1.44	
28.	7.15	5.81	0.0	0.0	0.845	0.0	0.864	1.42	1.42	1.43	1.41	1.44	

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PACK NO. 36A DEPTH OF DISCHARGE 25. TEST TEMPERATURE 40. C

G.E. 12 A.H. 3RD ELECTRODE RES 6.8 6.8 6.8 6.8 6.8 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	THIRD ELECTRODE					CELL VOLTAGE					END OF DISCHARGE AH OUT
		6.00	1	2	3	4	5	1	2	3	4	5	
59.	5.93	5.94	0.065	0.1[illegible]9	0.189	0.299	0.171	1.19	1.20	1.14	1.19	1.21	
75.	4.90	5.75	0.049	0.087	0.070	0.148	0.107	1.17	1.15	0.19	1.17	1.19	
		6.00											END OF CHARGE
59.	7.03	3.67	0.646	0.834	0.719	0.838	0.846	1.40	1.41	1.40	1.41	1.42	
75.	7.05	3.62	0.621	0.819	0.687	0.830	0.837	1.40	1.41	1.40	1.41	1.42	

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PACK NO. 26C DEPTH OF DISCHARGE 1[illegible] TEST TEMPERATURE 25. C

GULTON 4 A.H. COULOMETER PERCENT OF RECHARGE [illegible] ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	COULOMETER CURRENT	CELL VOLTAGE										END OF DISCHARGE
		1.20	1	2	3	4	5	6	7	8	9	10	
4.	6.36	1.20	0.03	1.29	1.29	1.28	1.30	1.27	6.39	0.0	0.0	0.0	
34.	6.26	1.18	0.05	1.27	1.27	1.[illegible]	1.27	1.25	6.29	0.0	0.0	0.0	
		1.20					[illegible]					[illegible]	END OF CHARGE
4.	7.87	0.44	0.74	1.44	1.44	1.43	1.42	1.45	7.12	0.0	0.0	0.0	
34.	8.02	0.34	0.71	1.43	1.42	1.42	1.39	1.49	7.19	0.0	0.0	0.0	

177

PACK NO. 38D DEPTH OF DISCHARGE 60. TEST TEMPERATURE 25. C
GULTON 4 A.H. COULOMETER PERCENT OF RECHARGE NA REST PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE										END OF DISCHARGE
		3.20	1	2	3	4	5	6	7	8	9	10	
4.	6.13	3.20	0.04	1.25	1.25	1.24	1.25	1.23	6.17	0.0	0.01	0.0	
38.	5.92	3.21	0.06	1.20	1.21	1.21	1.20	1.19	5.97	0.0	0.0	0.0	
102.	5.74	3.19	0.06	1.16	1.19	1.18	1.17	1.14	5.79	0.0	0.01	0.01	
		3.20											END OF CHARGE
4.	7.92	0.84	0.78	1.43	1.42	1.43	1.43	1.47	7.13	0.0	0.0	0.01	
38.	8.00	0.75	0.76	1.42	1.41	1.41	1.39	1.44	7.11	0.02	0.02	0.03	
102.	7.38	0.04	0.56	1.38	1.37	1.37	1.37	1.37	6.81	0.0	0.01	0.01	